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Select Committee on Drugs

HEARINGS

HELD AT
PARLIAMENT BUILDINGS
TORONTO ONTARIO

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SELECT COMMITTEE ON DRUGS

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Proceedings of hearings
held at Parliament Buildings,
Toronto, Ontario, on Wednesday,
the 5th of October, 1960, at
10.00 a.m.

9

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11

COMMITTEE:

12

MR. H. L. ROWNTREE, Q.C. Chairman

13

14

15

16

MR. A. WREN

17

MR. J. A. FULLERTON

18

MR. J. TROTTER

19

MR. R. E. SUTTON

20

MR. R. J. BOYER

21

MR. N. WHITNEY

22

MR. H. J. PRICE

23

MR. K. BRYDEN

24

MR. J. WHITE

25

MR. G. F. LAVERGNE

26

27

28

MR. S. J. GADSBY, F.C.I.S., Secretary

29

MR. HAROLD A. RICE, Committee Counsel

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1
2 --- On resuming at 10.00 a.m.

3
4 THE CHAIRMAN: We will proceed with Dr.
5 Ferguson who is coming before the Committee on behalf
6 of the Connaught Laboratories. Mr. Rice?

7 MR. RICE: Dr. Ferguson, will you come
8 forward.

9
10 --- DR. K. FERGUSON, Director Connaught Medical Research
Laboratories comes forward.

11
12 MR. RICE: Dr. Ferguson, for the purpose
13 of the record will you state your full name.

14 DR. FERGUSON: James Kenneth Wallace
15 Ferguson.

16 MR. RICE: What is your profession?

17 DR. FERGUSON: I am a medical doctor and
18 professor in the University and Director of the
19 Connaught Medical Research Laboratories.

20 MR. RICE: From what university did you
21 graduate?

22 DR. FERGUSON: Graduated from the University
23 of Toronto in medicine in 1932.

24 MR. RICE: And subsequent to graduation,
25 did you do any post graduate studies or work?

26 DR. FERGUSON: Yes, I did post graduate
27 studies in physiology before graduating and obtained
28 a M.A. degree, and afterwards studied at Cambridge
29 University, and after that I was professor, or
30 assistant professor of physiology in the University of



1

2

Western Ontario, and after that Ohio State University.

3

I came back to Toronto as an assistant professor in

4

the Department of Pharmacology.

5

MR. RICE: Can all the members of the

6

Committee hear Dr. Ferguson?

7

What is your position with Connaught

8

Laboratories?

9

DR. FERGUSON: I am the director of the

10

Laboratories.

11

MR. RICE: How long have you held that

12

position?

13

DR. FERGUSON: For five years.

14

MR. RICE: Were you associated with the

15

Laboratories prior to that time in some other capacity?

16

DR. FERGUSON: I had no connection with

17

the Laboratories before that. I was professor and

18

head of the Department of Pharmacology at the University.

19

MR. RICE: I understand, Doctor, you have

20

a brief that you would like to deliver to this

21

Committee.

22

DR. FERGUSON: Yes sir, I have a paper on

23

the general activities of the Laboratories if they

24

wish to hear it.

25

MR. RICE: Will you proceed?

26

DR. FERGUSON: Mr. Chairman and gentlemen.

27

The Connaught Medical Research Laboratories

28

do not operate as an independent corporation. They

29

are a part of the University of Toronto. Their purpose

30



1
2 is to conduct medical research and to manufacture and
3 distribute medical products with special emphasis on
4 those which are important for programs of public health.
5 They are also an important instrument of postgraduate
6 education at the most senior level. Although essen-
7 tially self-supporting, the Laboratories have long
8 been recognized as an institution of public service.
9 They are administered by a committee of the Board of
10 Governors of the University known as the Connaught
11 Committee. Like other members of the Board of
12 Governors, the members of the Connaught Committee serve
13 without remuneration and with the public interest as
14 their prime concern.

15 With this brief orientation, we may proceed
16 to examine the operations of the Laboratories which
17 effect the price of drugs in Ontario. This is the
18 main emphasis of this presentation. In doing so, the
19 history of the Laboratories and some of their complex
20 functions will be brought into perspective.

21 Range of Activities

22 The substances with which we in Connaught
23 are mainly concerned are: antitoxins, vaccines, insulin
24 and other glandular extracts, liver extract, heparin,
25 human serum proteins, and penicillin. These are known
26 as biological products. They are biologically
27 produced chemicals as distinct from synthetically
28 produced chemicals. The difference is sometimes a
29 little hard to draw exactly, but they are two main
30



1
2 groups of chemicals which are distinct in their
3 origin. Biologicals have been and still are the
4 object of a great volume of medical research, much of
5 which is supported by benevolent research foundations
6 or government grants. Synthetic chemistry on the
7 other hand has been more the field of private industry.

8 If I may digress for a moment, one of the
9 reasons for that is that synthetic chemistry in the
10 early days of the 19th century was largely pioneered
11 by the great dye and chemical works in Germany and
12 Europe and so they got a head start there.

13 I mention this distinction to explain the
14 development of some of our institutions and commercial
15 customs. Because many biologicals have been dis-
16 covered or invented in non-commercial laboratories,
17 not all by any means, but many, there has often been
18 a lag in their development and use on a large scale,
19 particularly when the commercial advantages of
20 exploitation seem dubious.

21 I might just expand on that a little bit.
22 We have a discovery. Wherever it is and what ever
23 class it belongs to, if it has a really clear and
24 pharmaceutical application, there is no trouble about
25 getting it exploited and developed commercially. But
26 it is a bit doubtful sometimes and we see some cases
27 that might not have any commercial advantages. There
28 may be a long time before it is applied to any practical
29 use.
30



1
2 In many instances, as we shall see,
3 Connaught has pioneered the large-scale production of
4 such items. As an example of this kind of pioneering,
5 I can state that we are at the present time spending
6 a great deal of energy and money on developing the
7 production of and testing live poliovirus vaccine which
8 may or may not offer substantial advantages over Salk
9 vaccine. That is one of the reasons why the
10 commercial exploitation is lagging a bit. I am not
11 just sure there is going to be a great commercial
12 advantage here at all.

13 I believe that it is fair to say that we are
14 as far advanced as any laboratory on this continent
15 in the large-scale production of live poliovirus
16 vaccine. The Governors of the University have
17 authorized the large expenditures required by this
18 program, not because they expect financial returns,
19 but because Connaught can and therefore should, do this
20 kind of pioneering in the interest of the Canadian
21 public.

22 Now, starting on the specific classes of
23 products in which we are interested, the seven classes
24 of medicinals listed above have very different
25 commercial aspects and patterns of use, so that we
26 should consider each class separately. We can start
27 with the antitoxins. The first name of the Connaught
28 Medical Research Laboratories was the Antitoxin
29 Laboratory in the Department of Hygiene of the University
30



1
2 of Toronto. It was officially established in 1914
3 specifically to make antitoxins and vaccines, which
4 were badly needed, expensive, and not made in Canada.
5 We read in the first annual report of Dr. J. G.
6 FitzGerald the first Director, that, "The fundamental
7 idea underlying the project was the production of all
8 sera and vaccines of value in public health work and
9 their distribution at cost. It was expected that the
10 active cooperation of public health authorities in
11 Canada would be obtained and this has in large measure
12 been realized." That was in 1914. The importance
13 of research was also emphasized in the first report,
14 not only for the evaluation and improvement of products,
15 but as an aid and inspiration to medical education
16 in public health.

17 Dr. FitzGerald was a man of infectious
18 enthusiasm and of great personal charm who inspired his
19 colleagues and deeply impressed many members of the
20 Board of Governors of the University of Toronto.
21 Among these was Colonel Albert E. Gooderham, who was
22 also a member of the Central Executive Committee of the
23 Canadian Red Cross Society. The onset of the first
24 World War brought the Red Cross Society into the market
25 for some of the products of the little laboratory, which
26 was now overwhelmed by demands for its products.
27 Colonel Gooderham saw the inadequacy of the quarters
28 in the sub-basement of the medical building from which
29 Dr. FitzGerald was trying to fill urgent orders of the
30



1
2 armed services and the Red Cross Society, and he did
3 something about it.

4 We actually see these quarters right across
5 the street and for many years I was in charge of them.
6 They were in the sub-basement of that big building
7 there and I can assure you they were hardly fit to
8 house animals, let alone an active laboratory.
9 However, Dr. FitzGerlad started in with what he had
10 and made the best of it. Colonel Gooderham did
11 something about this state of affairs. With his own
12 funds he bought a 50-acre farm, built and equipped a
13 laboratory on it and presented all this to the University
14 for the use of the Antitoxin Laboratory. At his
15 request the new facilities were called the Connaught
16 Laboratories, a name which was later applied to the
17 whole organization.

18 Antitoxins were the wonder drugs of the first
19 two decades of the century. Now they are declining
20 in medical importance and very unattractive commercially.
21 Very few, if any, were patented. For various reasons
22 there were some public opinion that patenting of
23 medical products was unethical and immoral and many
24 of these were developed, the antitoxins, and University
25 Departments and other non-profit institutions.
26 Perhaps as the result of this, but mostly as a result
27 of their low price and the difficulty of manufacturing
28 them, most firms on this continent have stopped making
29 them. The main source of supply now is from state
30



1
2 laboratories and institutions of public service like
3 Connaught. A few firms in England and in Europe
4 seem to be able to make and sell antitoxins at a profit
5 on the world market. We are not in that position.
6 We cannot do it. But because we believe that anti-
7 toxins will be needed for some time to come and because
8 we feel that they should be made in Canada, we have
9 recently devoted considerable sums to research on how
10 to make them more efficiently.

11 The next class of substances are the vaccines.
12 They are very different both medically and commercially
13 from antitoxins.

14 Vaccines are in a different class, medically
15 and commercially, from antitoxins. They are more
16 interesting in both respects. Their commercial
17 interest is less in Canada than in the U.S.A. because
18 most of the important vaccines are bought by Provincial
19 Departments of Health and distributed free to all
20 doctors, as a measure of public health in preventive
21 medicine. Newer and better vaccines are being
22 introduced every year. Some have appeal and sales
23 potential for special groups such as industries, or
24 geriatric practitioners, or pediatricians. Patenting
25 of vaccines used to be rare, but is now becoming more
26 common. Salk vaccine was not patented because its
27 development was largely financed by the National
28 Foundation for Infantile Paralysis. Improvements on
29 Salk vaccine have, however, been patented by several
30



1
2 firms. Broadly speaking, the market for vaccines
3 tends to be chaotic, subject as it is to shortages
4 and surpluses dependent on the occurrence or absence
5 of epidemics, which are unpredictable.

6 In the field of vaccines as in that of anti-
7 toxins, it is public knowledge that the price policies of
8 Connaught have enabled the Canadian public to have new
9 and important vaccines like Salk vaccine from the very
10 beginning at prices considerably below those prevailing
11 in the United States. There often occurs, however, an
12 ironic twist to the price situation. When a new
13 technique becomes well-known many firms start
14 producing. Overproduction inevitably occurs. Prices
15 fall catastrophically. Producers with high standards
16 of quality and high overhead because of research are
17 forced out of business by cheap producers with low
18 overheads. This has happened to Connaught with many
19 products, because our operation has a large research
20 overhead and our standards of quality are very high.
21 We accept these situations, a little bitterly sometimes,
22 but with the realization that we should concentrate on
23 pioneering, not on destructive competition.

24
25 (Page 971 follows)
26
27
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29
30



1 Insulin

2 Insulin is a much more orderly product than
3 any vaccine. The demand from year to year is relatively
4 predictable. The way in which its production and
5 distribution was controlled by patents held by the
6 University of Toronto was almost utopian. It demonstrates
7 that patents on drugs need not work against the public
8 interest if they are administered in a responsible and
9 intelligent manner. It was with great reluctance that
10 Dr. Banting agreed to apply for a patent. He was one
11 of those doctors -- there are still many -- who thinks
12 it's immoral to have a patent on drugs but he was
13 finally persuaded to do so because on knowing the
14 situation, there is just nothing else to do about it
15 if we wanted certain objects to be obtained. The
16 deciding considerations were probably the following:
17 (1) Without a patent there would be no effective
18 control over the quality of the potentially dangerous
19 new drug. At that time there were no government
20 laboratories which could do the necessary assays.
21 In fact, the method of doing the assays had not even
22 been developed. (2) Without a patent, there would
23 be no way to ensure that someone else might not obtain
24 a patent which might hinder the generous use of his
25 discovery. The patent was assigned to the University
26 of Toronto and administered in such a manner that the
27 proceeds were devoted to medical research. This was
28 important because there was literally no money for
29 medical research in Canada at that time. There was
30



1 no money to even support Dr. Banting in the first
2 years of his activities, as is reported in his various
3 biographies.

4 That the patents which were administered
5 by the Insulin Committee of the University of Toronto
6 were not used to maintain prices, is shown by the
7 steady decline in price to the user from 1922 to 1942.

8 In 1922 the price of a common daily dose,
9 i.e. 20 units, was \$2. In 1932 it was 10 cents.
10 In 1942 it was less than 5 cents. The price has not
11 increased since! I wonder if there is any other
12 commodity or service of which that could be said?
13 This astounding situation has been the result of
14 steady improvement in efficiency of production due
15 to continuous research, the benefits of which were
16 passed on to the consumer. The research still continues,
17 because the cost of every factor in production is still
18 increasing. Only increased efficiency can keep the
19 price steady.

20 The retail price of insulin in Canada today
21 is about 35 percent lower than in the U.S.A., as
22 far as we can tell. This differential is not due
23 entirely to the efficiency or benevolence of Connaught.
24 It is due to the co-operation of many groups and persons.
25 In the first place, retail druggists operate on a
26 smaller margin with insulin than with other drugs.
27 In the second place, the meat-packing companies have
28 always co-operated by selling pancreatic glands to
29 Connaught at considerably lower prices than they could
30



1 get by exporting them. Perhaps we should also acknow-
2 ledge the co-operation of the Minister of Finance,
3 who doesn't levy a sales tax on this particular drug!

4 Mr. Chairman, might I ask if the field of
5 sales tax on drugs has been aired in this Committee as
6 yet?

7 MR. CHAIRMAN: Not as yet.

8 MR. FERGUSON: Few people will deny that Canada was lucky
9 to have Connaught when insulin was discovered.
10 Connaught in turn was lucky to have insulin. The
11 steady predictable revenues from insulin allowed a
12 development of staff and research which has been the
13 envy of similar institutes of public service, like
14 the Lister Institute and the Wright-Fleming Institute
15 in England. Wright-Fleming Institute was where
16 penicillin was first discovered. Only the great
17 Pasteur Institute in Paris has done as well or better
18 in financing its own development.

19 The Connaught Laboratories recognize a great
20 responsibility for the welfare of some 150,000
21 diabetics in Canada who are dependent for their lives
22 on daily doses of insulin. A stockpile of insulin
23 crystals, sufficient for more than three years' supply,
24 is dispersed in three widely separated localities.
25 With the co-operation of the Provincial Department of
26 Health, elaborate and rather expensive arrangements
27 have been made to disperse equipment needed for the
28 filling and shipping of insulin in case the Laboratories
29 are destroyed by hostile action.
30



1 recent example. The Connaught Laboratories were the
2 first to market a multiple vaccine against diphtheria,
3 tetanus, pertussis and polio. We knew that others
4 would soon do the same. We obtained a patent to secure
5 our right, and that of others, to market our product.
6 We have made no claims on other firms who are now
7 selling a similar vaccine.

8 Other Glandular Products

9 Over the years the Laboratories have pioneered
10 in providing a number of other life-saving glandular
11 extracts during the early phases of their introduc-
12 tion to medical practice. These included adrenocortical
13 hormone, the lifesaver for persons with Addison's
14 disease; and corticotrophic hormone for collagen
15 diseases, and arthritis and asthma. Adrenocortical
16 hormone was made obsolete by cortisone and its
17 synthetic relatives. They also eclipsed corticotro-
18 phic hormone. These two glandular products might be
19 called short-term successes. Certainly for a few years
20 there was a great demand for and a severe shortage of
21 corticotrophic hormone, better known as ACTH. The
22 preparation had to be rationed and allocated by a
23 committee of the National Research Council. Connaught
24 played an important part in alleviating the shortage.
25 Soon, however, the demand slackened, and for various
26 reasons, Connaught was unable to retain any substan-
27 tial share of the diminished market.

28 One prefers naturally, to talk only about
29 successes, but it should not be forgotten that Connaught
30



1 has had its fair share of disappointments and failures.
2 All too many researches were continued for many years
3 with great hopes from time to time only to end in
4 disappointment. Some are still going on. There are
5 also the embarrassing limited successes; products
6 which are useful occasionally for rare emergencies, or
7 unusual infections. We feel obliged to keep these in
8 supply. In this respect we are not different from other
9 firms who do the same thing, although they are a
10 financial burden. Not quite in this class, but
11 embarrassing in its own way is the story of liver
12 extract.

13
14 In 1928 Drs. Minot and Murphy in Boston
15 discovered that eating liver in rather large amounts
16 would cure pernicious anemia, a fatal disease. A race
17 ensued to concentrate the active principle. No
18 patents were involved, as far as I know, and for many
19 years Connaught was well up with the leaders. Eventually,
20 we supplied an extract of exemplary purity but the
21 price was high. Others could sell a good-enough
22 product for a lower price. Strangely enough, we re-
23 tained a share of the market on grounds of quality.
24 We still retain it in spite of another development,
25 namely the discovery of vitamin B_{12} , which is the
26 active principle against pernicious anemia, and is
27 recovered as a by-product in the manufacture of certain
28 antibiotics.

29 Heparin

30 In the early 1930's, Dr. C.H. Best, who was



1 then an Associate Director in the Connaught Laboratories,
2 stimulated some of his colleagues to investigate the
3 production of heparin, a substance which prevents the
4 coagulation of blood. Heparin had been discovered and
5 named many years before by Professor Howell in Baltimore,
6 but it was merely a scientific curiosity. This is an
7 example of what I was saying before about something that
8 is potentially useful, discovered in a non-productive
9 institute non-exploited because both its use and its
10 commercial value were dubious because of its high price.
11 To make a long story short, processes were discovered
12 to produce heparin in commercial quantities from
13 beef lung, and patents were taken out by Connaught.
14 They proved to be of rather limited value, however,
15 because for many interesting reasons, heparin did not
16 come into use on a large scale until most of the
17 patents had lapsed! Now it is made all over the
18 world. Argentina is a major supplier because beef
19 lungs are cheap there. So failing to benefit
20 Connaught very much, the introduction of heparin did
21 start a world-wide industry!

22 World War II

23 Then came the second World War and
24 Connaught was called upon to multiply its efforts
25 in all directions. From a figure of about 200 before
26 the war, the number of persons on the staff increased
27 eventually to more than 900. At this time the
28 Laboratories began experimenting, again due to the
29 stimulus of Dr. Best, with the drying of human serum
30



1 and plasma, and developed an association with the
2 Canadian Red Cross Society which has persisted. The
3 Red Cross Society collected the blood and the
4 Connaught Laboratories processed the serum or plasma.
5 Before the war was over, the Laboratories had processed
6 more than two million blood donations into 500,000
7 bottles of dried serum or plasma for the armed services.
8 Government grants for direct expenses supported the
9 project in large part. Another example of where the
10 Government comes in here and there.

11 Penicillin

12 In August 1943, the Dominion Government re-
13 quested the Connaught Laboratories to undertake
14 production of penicillin. It was needed by the
15 armed services and was quite unobtainable. Already
16 operating in the Banting & Best Department of Medical
17 Research was a pilot plant sponsored by the National
18 Research Council so that persons with experience, know-
19 how, were available. For the large-scale production,
20 the Government in effect provided the equipment and
21 a cost plus contract. This lasted for just a few years
22 and later the equipment was sold to Connaught.
23 Similar arrangements were made by the Government with
24 the firm of Ayerst, McKenna & Harrison in Montreal.
25 Merck & Company also established a small plant in
26 Montreal a little later. Thus at the end of the war,
27 there were three Canadian laboratories making penicil-
28 lin from primary ingredients by fermentation. Later
29 Merck & Company built a large fermentation plant in
30



1 Valleyfield, Quebec, for the production of penicillin
2 and streptomycin. The three plants between them had
3 ample capacity to supply the needs of Canada. Soon,
4 however, world surpluses of penicillin began to
5 accumulate. Imports of penicillin and streptomycin
6 forced prices down to disastrous levels, disastrous
7 from producers' point.
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28 --- (Page 981 follows.)
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1 The Ayerst fermentation plant was closed in
2
3 1954. The Connaught plant was closed in 1956, and the
4 Merck plant in 1960. Now there is no primary manufacture
5 of penicillin in Canada. Secondary manufacture does
6 continue, using unfinished imported penicillins. One
7 wonders what would happen to Canadian supplies of this
8 essential drug if a war in Europe stopped exports to
9 us from Europe, and if at the same time, the government
10 of the United States decided to stockpile all available
11 penicillin! Such an unpleasant possibility makes
12 us in Connaught very unwilling to yield to competition
13 in this case as easily as we have in others. We are
14 struggling to maintain some manufacture of penicillin
15 and to keep some fermentation operations going. We are
16 continuing to do research on penicillin. Maybe we will
17 discover a better penicillin. There are some interesting
18 possibilities here. If we don't, the prospects are dis-
19 couraging. After the war the drying of human blood
20 plasma was continued, using outdated blood supplied
21 by the Canadian Red Cross Society. By that I mean
22 blood which is kept a month and can't be used any more
23 for transfusions. In this way, whole blood which could
24 no longer be used was converted into a product which
25 was not quite as beneficial as fresh whole blood, but
26 which was nevertheless very useful in emergencies. At
27 the same time, our scientists were noting carefully
28 the progress which was being made at Harvard University
29 on methods of separating the various components of
30 human plasma. One component in particular, gamma



1 globulin, suddenly became the focus of interest when
2 it was shown that injections of this substance could
3 protect persons exposed to infection by poliovirus from
4 contracting the disease. During the postwar years
5 Canada, as many will remember, experienced several
6 devastating epidemics of paralytic poliomyelitis. With
7 some method of combatting these epidemics now
8 in sight, the Department of National Health and Welfare,
9 with the cooperation of the Provincial Departments of
10 Health, the Red Cross Society and the Connaught Labor-
11 atories, organized a national project to supply gamma
12 globulin on a large scale using blood collected for
13 the purpose by the Red Cross Society. Production of
14 gamma globulin had just reached its planned peak
15 when Salk vaccine became available. Interest in
16 gamma globulin subsided rapidly. It is still useful,
17 however, for the prevention or alleviation of a variety
18 of ailments and production continues at a reduced rate,
19 again making use of outdated surpluses of blood supplied
20 by the Red Cross. A number of other components of
21 the outdated plasma are also being separated and put
22 to good use. These include serum albumin and fibrinogen.
23 From fresh blood supplied by the Red Cross, we
24 are also producing anti-hemophilic globulin, a substance
25 which restores normal clotting power to the blood of
26 persons who suffer from the hereditary hemmorrhagic
27 disease called hemophilia. This is being produced
28 on a rather small scale, given back to the Red Cross
29 and distributed free to the sufferers of this disease.
30



1 Research on these and other components of human plasma
2 and being pursued very energetically. Some explanation
3 of the sources of revenue of the Connaught Medical
4 Research Laboratories may now be attempted. The most
5 important of course, is the sale of products.
6 Connaught, however, does not have a single salesman!
7 The foregoing sketch of our products has made it
8 clear that we must have some methods for distribution.
9 Apart from direct sales to governments in Canada or
10 abroad, we supply by mail order to all drug stores,
11 hospitals and doctors.

12 In other words, anybody has the right to
13 buy; we don't control those outlets. For particular
14 lines and regions, we have agents or distributors
15 in Canada and in several other countries. All of
16 these are independent well-established businesses which
17 handle many products besides those of Connaught. Our
18 sales policies can be described as studiously non-
19 aggressive. We refrain from undue influence on
20 medical thinking. That may be good, it may be bad.
21 I don't think it sounds very virtuous, but if sometimes
22 we had used a little more influence it might have been
23 better. But we meet the medical profession through
24 its various organizations, scientific publications
25 and see what they want to do in the matters of medical
26 statements. When the sales of any particular line
27 seem to depend mostly on the arts of competitive
28 salesmanship, we feel that it is not a line for Connaught,
29 and we let it die quietly. As noted above, an exception
30



1 is penicillin. In the national interest, we feel
2 that we must keep some production going. here, to
3 keep some possibility of making penicillin in Canada.

4 Nevertheless, the Laboratories have been
5 essentially self-supporting formore than 45 years. They
6 receive no contributions from funds of the University.
7 On the other hand, the University does not use the
8 earnings of the Connaught for general purposes. Mindful
9 of the Deed of Trust from Colonel Gooderham and Mrs.
10 Gooderham, the Governors of the University have
11 kept the earnings of Connaught as a separate fund for
12 the support of medical research in the Connaught, in
13 other departments of the University and in other
14 universities in Canada. Thus, Connaught is and has
15 been for many years, a donor of funds for medical
16 research, a fact which is puzzling to some persons because
17 Connaught is also a recipient of funds for medical
18 research. I will discuss this shortly, but first I
19 should like to clarify some common misunderstandings
20 about Connaught is supported by the "Government".
21 This is hardly the case.

22 They are all more or less customers of
23 Connaught, but none of them is responsible for our
24 activities, our deficits; they don't care of it at
25 all. In the early records we find mention of small
26 grants from the federal or provincial governments
27 for special purposes. For example, in 1915, the federal
28 government made a grant of \$3,000 to start the produc-
29 tion of tetanus antitoxin for the armed services.
30



1 In 1917, on the occasion of the opening of the labora-
2 tories presented by Colonel Gooderham, Sir William
3 Hearst, the Premier of Ontario, promised an endowment
4 of \$75,000 to match the Gooderham gift; it was
5 recommended that there had to be something to carry
6 on the research. For some reason, the sum was
7 not actually delivered, but for many years the
8 Laboratories received a cheque for \$3,750 each year,
9 equivalent to the interest at 5% on \$75,000. These
10 payments stopped in 1938.

11 In 1923, the Province of Ontario made a grant
12 for \$25,000 to equip a laboratory for the manufacture
13 of insulin. This was just the start; this was
14 perhaps the first substantial bit of capital that
15 the Connaught used. It was called the Connaught Antitoxin
16 Laboratory at that time.

17 In 1927 the School of Hygiene was established
18 in the University of Toronto with the assistance of
19 a grant from the Rockefeller Foundation. In fact, it
20 was wholly paid for by a grant from the Rockefeller
21 Foundation.

22 By 1931 the new building was too small. The
23 Rockefeller Foundation offered to increase the endow-
24 ment of the School if the Government of Ontario would
25 build an extension. The only available source of
26 capital was the endowment fund of the Connaught Laborator-
27 ies. The amount required, which turned out to be about
28 \$350,000, was supplied on the understanding that the
29 Government would pay an annual grant to replace the
30



1 loss of income for research. The annual grant agreed
2 upon was \$14,250. It was reduced for one year, but
3 was quickly restored. This is the explanation of the
4 annual grant from the Government of Ontario to the
5 Connaught Medical Research Laboratories.

6 Now, the estimates of Ontario I think you
7 will find there is a grant; I think you will find
8 it is \$15,250. \$14,250 is this gentlemen's agreement,
9 interest, you might say, on the loss by Connaught,
10 and the other thousand dollars is actually something
11 we passed onto our research department in the university.
12 Now, it was said the government had to go through
13 the university if they gave it to Connaught, if they
14 pay over to this physiological department on industrial
15 hygiene, then that takes care of the formalities.
16 You will see this is not an ordinary grant in any sense.

17 From time to time, gifts, bequests, and
18 legacies, some large and some small, have been presented
19 to the Laboratories, some for specific purposes, others
20 for the general research program. One which deserves
21 special mention was from Mr. F. K. Morrow, a former
22 Vice-Chairman of the Connaught Committee. Another was
23 from the late Dr. W. B. Boyd of Coldwater, quite a
24 large sum; I can't remember exactly what it was.

25 Sine the war, the number of agencies granting
26 funds for medical research in Canada has greatly increased.
27 The sums which they distribute have also increased.
28 Among those which have made annual grants to the Connaught
29 Medical Research Laboratories from time to time, we can
30



1 name the National Research Council, the Defence Research
2 Board, the Dominion-Provincial Public Health Research
3 Grants, the Bickell Foundation, and the National Cancer
4 Institute. From the United States we have received
5 funds through the agency of the National Institutes
6 of Health in Washington, and the National Foundation
7 for Infantile Paralysis Inc. of New York. All of
8 these sums were of course, spent and strictly accounted
9 for in accordance with the terms of each grant. During
10 the years of development of Salk vaccine, the
11 Laboratories received large sums from the National
12 Foundation for Infantile Paralysis in New York which
13 were not grants but payments for the manufacture of
14 poliovirus on a large scale for processing into vaccine
15 by commercial firms in the United States for the mass
16 field trials of the vaccine in that country.

17 The provision of research funds in the form
18 of annual grants on a relatively large scale since
19 World War II, not only to the Connaught Laboratories
20 but to other scientific laboratories, has resulted
21 in the training of medical scientists in numbers pre-
22 viously unprecedented in Canada. And that brings up
23 another problem. Keeping these persons well employed
24 at the work for which they have been expensively trained,
25 means that ever-increasing sums must be found. The
26 granting agencies and foundations find themselves
27 pressed for more and more money. The academic institu-
28 tions are finding the competition for research funds
29 greater each year. Under these circumstances, it seems
30



1 only reasonable for the Connaught Medical Research
2 Laboratories to rely more on its own earnings to support
3 its research, and to become a net donor rather than
4 a net recipient of research funds. The Laboratories
5 are already in this position. We give more money
6 away for research than we receive. I mean by giving,
7 outside of Connaught.
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2 To fulfil our function in this expanding
3 and maturing country, Connaught has an obligation to
4 develop its own staff. In addition, it does in fact
5 train scientists for many key positions in government,
6 in hospitals, and in industry. By training, I don't
7 mean academic course work leading to degrees, doctor's
8 degrees or some other degree. I mean working
9 experience for five or ten years after a doctor's
10 degree, filling posts of increasing responsibility.
11 We have sent many men with such experience to fill
12 important positions across Canada. We can and should
13 supply more. At the same time, we need to expand
14 our staff to cover broader fields of medical research
15 within our own walls -- many of those we can't
16 tackle just now for lack of staff -- so that we can
17 ensure that the benefits of new discoveries will be
18 brought promptly to the service of Canadians.

19 Specifically, we believe that we have a
20 responsibility to engage constantly in programs of
21 research to discover new products of importance to
22 public health, and the practice of medicine. In
23 addition, we must seek constantly to evaluate -- and
24 this is expensive research -- and to improve the
25 products which we now supply.

26 We must scan the whole field of medical
27 research to keep abreast of new developments and to
28 take as our special concern, the development or
29 production on a large scale of potentially useful
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1
2 discoveries which would not otherwise be made available
3 in Canada, the very excellent commercial facilities
4 for research which are available on this continent.

5 Finally, we must exercise our functions in
6 advanced education by postdoctoral fellowships and by
7 sharing our knowledge with all who wish to learn.

8 MR. RICE: Just on your closing note
9 there about the Connaught Laboratories submission, is
10 there much competition in this research work,
11 duplication of work being carried on?

12 DR. FERGUSON: Yes, there is some dupli-
13 cation. This is a question which many people ask,
14 and it is one which does not bother scientists a
15 great deal because no scientific fact can every be
16 regarded as established until it is duplicated and
17 reduplicated by several independent groups of persons.
18 That is one kind of duplication. Duplication and
19 reduplication is necessary to establish a scientific
20 fact.

21 The second thing is that so-called duplication
22 is seldom really complete duplication. No two groups
23 of people do the same thing and do it exactly the same
24 way, and they come out with different answers, and
25 they come out with different discoveries.

26 THE CHAIRMAN: It is not a waste?

27 DR. FERGUSON: It is not a waste. It is
28 a good investment.

29 MR. RICE: To turn back to the policies of
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1
2 the Connaught Laboratories in regard to patent rights,
3 I understand that the Connaught Laboratories do some
4 leasing of these patent rights to manufacturers who
5 manufacture certain drugs, and you, in your brief,
6 have directed the policy of Connaught in that regard
7 and a committee is set up. Dr. Ian Macdonald,
8 Doctor of Post Graduate School of Studies, University
9 of Toronto, informed the Committee earlier that it was
10 his impression with regard to insulin that one of the
11 features of this licensing policy was to ensure that
12 the insulin would be available to the Canadian public
13 at a reasonable price, reasonable having regard to
14 cost of the manufacture.

15 Is that part of the policy, the price that
16 is going to be charged for the product to the public?

17 DR. FERGUSON: With respect to insulin
18 you mean particularly?

19 MR. RICE: Well, any of your products that
20 you lease a patent to the manufacturer.

21 DR. FERGUSON: No. With our general
22 products other than insulin, I don't recall any of our
23 agreements in which there is any stipulation about
24 price. What we do try to write into all our agreements
25 is that there is no exclusivity in it. Anyone else
26 who wants to get in there can do so.

27 I think -- I am not very familiar with
28 this price control. You get into monopoly. Infringe-
29 ment of monopoly laws, and so on, and I don't know just
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2 what the rights or the practices of the Insulin
3 Committee have been in that respect. I think they had
4 some rights in determining price during those days.
5 Whether they still have or exercise them, I don't know.
6 However, we in Connaught don't do anything about
7 stipulating the price of any product which we license.
8 We do give licences to -- we don't keep them
9 exclusive.

10 THE CHAIRMAN: Do you charge a fee for the
11 licences?

12 DR. FERGUSON: There are many different
13 kinds of arrangements. Sometimes we just exchange
14 rights. They give us the right to use something of
15 theirs, so there is no financial exchange.

16 In some instances there is a disclosure fee
17 and a royalty. I might say the income from royalties
18 and licences in the case of Connaught Patents has been
19 almost negligible.

20 MR. RICE: Do you license different
21 manufacturers for the same product? In other words,
22 do you permit a licence to two different manufacturers,
23 or is there an exclusive quality to the licence?

24 DR. FERGUSON: It depends a great deal on
25 the product. If two or three or more come to us, they
26 never come right together at the same time. We say we
27 have already licensed so and so; do you think there
28 is business enough for two of you, and if he says yes,
29 we say, yes, you can have it.
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MR. RICE: Are there drugs being manufactured by manufacturers with licences from the Connaught Laboratories, and also the same drug being manufactured by a manufacturer who has developed his own process of making that drug?

DR. FERGUSON: Oh, I think that happens very often, which is the reason why the licensing is not very remunerative.

MR. RICE: Can you help the Committee at all as to how the prices compare of the two products? One product is manufactured through licence with Connaught, and the other is being manufactured by the manufacturer who developed his own?

DR. FERGUSON: I don't think I can make any statement on that that would be generally true, because in that kind of a situation competition determines the price.

MR. RICE: Now, with regard to penicillin, you have informed the Committee that the manufacture of penicillin has been drastically reduced almost to a nonentity now. How long would it take to commence the production of penicillin in Canada again if the necessity arose?

DR. FERGUSON: It might take nearly a year to supply the amounts needed in Canada.

MR. RICE: And could penicillin be stockpiled in Canada for that period of time?

DR. FERGUSON: Yes, it could. It keeps well.



1
2 MR. RICE: Are there any recommendations
3 that you could make to the Committee as to how the
4 cost of drugs can be reduced?

5 DR. FERGUSON: I don't think I would be
6 prepared to make any general recommendations on that
7 subject because it is a very conflicting matter as you
8 know.

9 There is no doubt at all that if there was
10 extreme regulations and socialized industry, the cost
11 could be reduced to the consumer. This is a very big
12 price to pay for that particular benefit.

13 I suspect you have found in your examinations
14 that perhaps the only problem lies in the price to the
15 consumer at the retail level; that any organization,
16 government, hospital or so on who can buy it by
17 competitive tenders may get drugs extremely cheap.
18 There is no problem there. The only problem is how
19 to supply cheaply to the person whose demands are very
20 small, and they are conveniently where he wants to get
21 them. That is an expensive service which perhaps
22 necessarily adds to the cost of the drug.

23 I am not convinced there is really a very
24 serious problem about costs in this country. There
25 are many annoyances, but they are annoyances which I
26 personally do not mind putting up with for the sake
27 of the benefits which we receive from our very energetic
28 system of invention, manufacture and distribution.
29 As you have seen, it is not wholly commercial. It is
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1
2 not wholly public. There is a certain amount of
3 competition and interplay as well as cooperation
4 between industry and some public service institutions.
5 It is a mixed economy picture. I personally have
6 no serious objections to it.

7 MR. RICE: Have any of the Committee
8 members any questions?

9 MR. FULLERTON: I wonder if Dr. Ferguson
10 could explain why he can import penicillin cheaper
11 than we can manufacture it in Canada?

12 DR. FERGUSON: I think there are two
13 important reasons, and it is hard to say which is the
14 most important. First of all, in Europe, particularly
15 in the last five years, they have recovered from the
16 war, and they are just as clever and just as well
17 trained as we are. They can use all the same methods
18 we use on this continent, and their labour costs are
19 half or less than half of what ours are, so we have
20 no advantage in production. We have a great dis-
21 advantage in price and cost.

22 Then, too, the other factor which I cannot
23 evaluate is that there is undoubtedly a tendency to
24 dispose of surpluses at any price wherever we can sell.
25 That is the pattern of exports, to maintain your home
26 market at a stable price if you can, and sell all your
27 surpluses at any price you can get in export. There
28 is no doubt that is the general policy.

29 So there are two factors that determine why
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1
2 we in Canada, which is a wide-open country as far as
3 the import of drugs is concerned, can purchase, if
4 we know how, many drugs at prices which are ridiculously
5 low in terms of cost of production in this country
6 or on this continent.

7 MR. BRYDEN: What would the proportion
8 of labour costs be on production, say, of a drug like
9 penicillin?

10 DR. FERGUSON: That is a question which
11 is often asked, and I am not sure that it is quite
12 the right way to put it. You have one hour of labour;
13 you have your supervisor who has to be paid more than
14 the labourer; you have the scientists who have to be
15 paid more; you have supplies which are obtained
16 preferably locally, determined by labour costs; you
17 have fringe benefits and pensions, sick-leave, and
18 they are all in proportion to the labour paid, so that
19 your whole cost is proportional to your labour costs.
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21 (Page 1001 follows)
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1 MR. BRYDEN: Yes, but it is presumably a
2 costly process to support the labour cost in that
3 particular process, taking the materials that are
4 used and the process.

5 DR. FERGUSON: Then your question is really,
6 what is the cost of direct hourly labour in comparison
7 with depreciation of the automation machinery that
8 you might put in?

9 MR. BRYDEN: And also in comparison to the
10 materials used. There are all sorts of items in it.
11 Also, what would be the items of labour, cost of
12 salaries and other benefits of scientists in the main
13 or production workers?

14 DR. FERGUSON: In the case of a self-
15 supporting institution of that kind, that has to go
16 into overhead, your total cost.

17 MR. BRYDEN: Is highly-trained personnel
18 a big item? For example, the medical staff or a
19 chemist, would that be a big item in it as compared
20 to the ordinary production worker?

21 DR. FERGUSON: Yes, you mean supervisory
22 salaries are very important in this kind of thing.

23 MR. BRYDEN: It might be a big item.

24 DR. FERGUSON: Yes, but again compared to
25 Europe, supervisors' salaries are lower there in
26 proportion to labour.

27 MR. WREN: In the event of a national
28 emergency, if you did not have a sufficient supply
29 of penicillin, what would you use as a substitute?
30



1 What would that substitute be?

2 DR. FERGUSON: You are talking about the
3 country as a whole or the medical profession.

4 MR. WREN: Yes, in the case of a national
5 emergency arising.

6 DR. FERGUSON: We lived for centuries without
7 penicillin, and we died a little oftener. There are
8 not very good substitutes for penicillin. There is
9 really nothing as good as penicillin for controlling
10 infection.

11 MR. WREN: Would you think, then, that it
12 might be a good idea to stockpile penicillin?

13 DR. FERGUSON: Yes. I do not know what plans
14 civil defence have for stockpiling penicillin. We
15 hear about it now and then.

16 MR. WREN: Nobody else knows what civil
17 defence is doing either.

18 DR. FERGUSON: Yes, but certainly one of the
19 things that should be stockpiled for civil defence is
20 penicillin.

21 THE CHAIRMAN: May I say as a general
22 principle there is a thread through your paper, Dr.
23 Ferguson, dealing with this question of "national
24 interest", having to do with the very reason for the
25 existence of Connaught.

26 DR. FERGUSON: Yes, indeed.

27 THE CHAIRMAN: I take it from the spirit of
28 the paper that it is not in direct conflict with
29 private industry.
30



1 DR. FERGUSON: We do not consider ourselves
2 in direct conflict with private industry. We are
3 supplementing in the fields where they have not, and
4 sometimes cannot play as important a part. Another
5 point is that we are producing things and distributing
6 things which are for the most part made in Canada,
7 and we can get them through without buying them from
8 subsidiaries of American firms.

9 We have seen on many occasions when there
10 is a shortage in the United States, the Canadian
11 subsidiaries with the best will in the world cannot get
12 them.

13 THE CHAIRMAN: Even from their parent
14 company?

15 DR. FERGUSON: Even from their parent
16 company, because they in turn may be held down by
17 export quotas or regulations of the Government of
18 the United States.

19 THE CHAIRMAN: Would you agree with this,
20 then, Dr. Ferguson, that a major item in the national
21 interest with respect to the subject of drugs is the
22 need for self sufficiency?

23 DR. FERGUSON: I feel that way very
24 strongly. I am not anti-American or anti-foreign, but
25 I feel that we should somehow develop more independent
26 and stronger chemical industries with respect to
27 pharmaceuticals, because that is the one I know about.
28 I cannot speak about the whole field.

29 THE CHAIRMAN: And having in mind the
30



1 economic conditions which exist in Canada and which
2 are peculiar to our country, the cause of being
3 nationally self sufficient is a factor in the cost
4 of drugs.

5 MR. BRYDEN: There has to be a considerably
6 greater government interest or intervention in this
7 field. It is almost inevitable in an industry like
8 this that private industry to a very important degree
9 will be controlled from outside this country. I think
10 that is the situation you get into, the actual
11 structure of the industry. I may be speaking without
12 adequate facts, but that strikes me that it is
13 controlled outside the country and cannot be improved
14 except by the government taking an active role.

15 DR. FERGUSON: Ours is a case -- what would
16 you call it -- of government enterprise which was
17 really a public supported private enterprise, in
18 which great co-operation has been enjoyed by the
19 company.

20 We were certainly the first here although
21 we are not the only one in Canada. There is the
22 Institute of Micro-Biology in Montreal which serves
23 a similar function, particularly serving French
24 Canada. We try to do this job of supplying essential
25 materials made in Canada for Canadian needs.

26 I am not sure that the Government sponsorship
27 of a large supply of pharmaceuticals is the only way
28 to do it. I would like to see it done. I think there
29 might be other ways of doing it.
30



1 MR. BRYDEN: Connaught Laboratories is
2 essentially an agency of the University of Toronto
3 which is a public institution. I perhaps was unduly
4 restrictive in using the term "government". Would
5 there be any public institutions of one kind or
6 another which may be government or may be using
7 government funds? In some cases governments can put
8 up money for foundations of one kind and another.
9 The government is not doing much more than making the
10 funds available.

11 DR. FERGUSON: It is certainly one way of
12 doing it.

13 MR. WREN: Having regard to the outstanding
14 success that you have had with insulin and the cost
15 to individuals and agencies which supply individuals
16 in Canada, do you think there is some merit in
17 institutional sponsorship, if you will, of other
18 necessary drugs for the common ailments of people
19 who are in unhappy circumstances such as heart
20 disease and other diseases which affect a person's
21 ability to earn an income? I am thinking of some drugs
22 which are still very expensive and yet are necessary
23 to a person to be able to get out and earn a living?

24 DR. FERGUSON: I suppose the diabetic
25 tablets or pills are a case in point, aren't they?

26 MR. WREN: Yes.

27 DR. FERGUSON: Could any non-profit
28 institutions get into this business? Of course in
29 Connaught we consider that very sincerely that we have
30



1 a responsibility to get into this.

2 MR. WREN: Which?

3 DR. FERGUSON: We considered whether we had
4 a responsibility, for example, of getting into the
5 matter of manufacturing and distributing these
6 synthetic chemicals which are now being used and which
7 are very useful for a small proportion of diabetics.
8 There are many reasons why we kept out of it.

9 In the first place they were not our own
10 invention. In the second place they are changing from
11 day to day, new ones being introduced every week and
12 we do not know which one is going to be really useful.
13 There seems to be adequate supplies of this available
14 through the ordinary commercial channels. We have no
15 fear that there will be a shortage or that they are
16 really essential to the health of the diabetics.
17 They are to some extent a luxury item.

18 These were some of the reasons why we
19 felt we should not go into this particular field.

20 MR. SUTTON: In reading your brief along
21 with you, when you mentioned the Wright Fleming
22 Institute, you had an aside. Did you say they were
23 the original discoverers of insulin?

24 DR. FERGUSON: Yes, Fleming was the man who
25 discovered penicillin, not insulin.

26 MR. SUTTON: Oh, I am sorry.

27 DR. FERGUSON: You see, back in the 1920's
28 he was the Director of the Institute which was called
29 the Wright Institute which is connected with St.
30



1 Michael's Hospital in London but it was many years
2 before it was applied for practical use.

3 MR. SUTTON: In the use of penicillin, the
4 frequent use of penicillin, is it true that our
5 hospitals today are having difficulty with boils
6 and abscesses and mastoids, and that the present
7 strength of the penicillin is ineffective?

8 DR. FERGUSON: Yes, in hospitals they are
9 plagued by staphoccal infections which are resistant
10 to penicillin. For that reason new compounds are
11 being discovered, research is continuing on kinds of
12 penicillin which will hit this resistance of
13 staphoccal infections, and a new compound of that
14 kind has been announced from the Beecham's Laboratory
15 in England.

16 MR. TROTTER: On page 5 of your brief you
17 say that the price of insulin in Canada is 35 per cent
18 less than down South. Would that difference of 35
19 per cent be on the part of the profit that the
20 druggist would make in the United States?

21 DR. FERGUSON: I believe they work on a
22 little higher mark-up, so part of it is that. Part of
23 it is in the lower price for packaging that we get.

24 MR. TROTTER: When you sell insulin to
25 the druggist here in Toronto, let us say, do you sell
26 to each individual druggist, or do you sell to
27 a central agency?

28 DR. FERGUSON: No, we are our own whole-
29 salers. We have two depots across Canada, one in
30



1
2 Vancouver and one in Winnipeg. We are wholesalers
3 and we sell directly to the druggist or by mail
4 order if they can pick it up.

5 MR. TROTTER: What does insulin sell for
6 wholesale?

7 DR. FERGUSON: To the druggist?

8 MR. TROTTER: Yes.

9 DR. FERGUSON: In other words, what is the
10 discount, the mark-up that he works on?

11 MR. TROTTER: I would like to know the
12 price that he has to pay, whether in bulk or any
13 other way?

14 DR. FERGUSON; There are so many different
15 packages and preparations, I do not know how to define
16 that. I will give you our price list. Would you like
17 it in your file? I can file it here.

18 MR. TROTTER: Well, yes. For example,
19 people I know have a needle and give themselves a
20 shot. How is that type of insulin sold to the
21 druggist?

22 DR. FERGUSON: He just asks for the kind
23 that he thinks his patient wants, or if the patient
24 comes in and asks him for some insulin -- they do not
25 usually leave this right to the last minute, you know --
26 the patient tells the druggist the size of the package,
27 the dose, the strength, the kind of insulin and so on,
28 and he gets on the telephone and orders it and it is
29 sent to him the next day by mail.

30 MR. TROTTER: Do you control the mark-up that



1 the druggists will have?

2 DR. FERGUSON: We don't control it, but we
3 certainly influenced it in the early days. In the
4 early days, probably 1923 to 1927, all sales were
5 directly from Connaught. The price was going down all
6 the time. That was not entirely satisfactory to the
7 patient, but it was the best way to get the lowest
8 price to the patient at that time.

9 The druggists requested they have the privi-
10 lege of distributing this, and by agreement, they agreed
11 they would charge a certain mark-up. If you want to
12 know what it is I presume it is public knowledge and
13 it is in our price lists.

14 In 1927 a letter went out from Connaught
15 to all diabetics that from then on they were to get
16 their insulin from the druggist. There was to be no
17 increase in price because of the fact we made a price
18 reduction. Prices were going down and the pharmacist
19 got that discount for handling it. At the present
20 time we do not sell to patients directly across the
21 counter. That is the druggist's job.

22 MR. TROTTER: Do you think the druggists
23 are still making money on insulin?

24 DR. FERGUSON: I suppose that depends on your
25 accountant if he can prove you are losing money or
26 making money.

27 MR. BRYDEN: They are still selling it.

28 MR. TROTTER: I am not objecting to people
29 making profit, but I am pleased and surprised to learn
30



1 that the price is going down because costs are going up
2 on everything else and yet insulin seems to be sold at
3 a lower price. I was wondering if the druggist could
4 still make a profit.

5 DR. FERGUSON: He is working on the same
6 margin now, I believe, as he did in 1927.

7 MR. WHITE: What is that margin?

8 DR. FERGUSON: 25 per cent.

9 MR. BRYDEN: 25 per cent is the discount?

10 DR. FERGUSON: 25 per cent is the discount.

11 MR. WREN: If the return of selling that
12 is \$1, it costs him 75 pcents?

13 DR. FERGUSON: That is right.

14 MR. WHITE: What would the price be to
15 hospitals or departments of government?

16 DR. FERGUSON: The hospitals are exactly
17 the same as the pharmacists, because there is no sales
18 tax. I cannot remember what our prices are, but they
19 are probably a little lower because of large quantity
20 buying of government departments.

21 MR. BRYDEN: I am really interested in getting
22 a little more information on the research activities
23 of the laboratories.



1 THE CHAIRMAN: Let's just pursue the subject
2 of pricing just for the moment, and come back to
3 that. I would like to ask you about two topics:
4 one, the obsolescence factor in the drug products.

5 DR. FERGUSON: May I have a drink of water?

6 THE CHAIRMAN: Would you like to take a five
7 minute recess? We will recess for five minutes.

8 ---Short recess.

9 ---Following recess.

10
11 THE CHAIRMAN: Now before the recess, I
12 was proceeding to enquire about the factor of obso-
13 lesence with respect to products manufactured and
14 distributed by Connaught.

15 DR. FERGUSON: Many products have become
16 obsolete very quickly. The examples I gave, adrenocortical
17 hormones, and A.C.T.H. became partly obsolete.

18 THE CHAIRMAN: Possibly I should expand
19 what I mean by the word "obsolescence." I should also
20 include aging factor.

21 DR. FERGUSON: Yes, shelf life. That varies
22 a great deal with the products. In general, the vaccines
23 have a short shelf life which adds to the difficulty
24 and chaos of their marketing. Insulin has quite
25 a long shelf life; about two years, if it is properly
26 kept.

27 THE CHAIRMAN: Turning to the question of
28 sales tax, have you any knowledge of the operation of
29 sales tax with respect to drugs sold in Canada?
30



1 DR. FERGUSON: I know that sales tax is
2 paid on many drugs, and there are a number of exceptions.
3 Salk vaccine doesn't pay any sales tax. Insulin
4 doesn't pay any sales tax. Penicillin, I believe does.
5 I can't go into very great detail on that.

6 THE CHAIRMAN: Would you have any information
7 Doctor about the incidence of sales tax in the United
8 States?

9 DR. FERGUSON: No, I am sorry. I don't
10 know what they do. I am sure there are State regulations.
11 In the States I don't believe they use the indirect
12 sales tax, but I do know in many States they use a
13 retail sales tax, which I think is very much better
14 because this 11 per cent sales tax on drugs, half,
15 or less than half goes to the government. The rest
16 is just pure inflation.

17 THE CHAIRMAN: You turned a neat phrase
18 in your testimony when you were referring to the use
19 of some drugs of an expensive type, and you described
20 them as luxury treatment. I take it that in using
21 those words you are inferring that there would be
22 less expensive drugs available to accomplish a similar
23 result?

24 DR. FERGUSON: Well to give you an example,
25 the anti-diabetic drugs are pills. You can use insulin
26 at four cents a day, or you can use one of these new
27 pills at 40 cents a day. If you do not like to take
28 a needle, you consider the luxury of taking a pill
29 is worth the difference, then you can do so.
30



1 Now sometimes it is even better medically
2 to pay something higher. Some people pay more attention
3 to their diet, and other factors of treatment.

4 Some doctors have told me this: that they find that
5 having the patient pay more for his drug makes him
6 pay much more attention to his treatment as a whole.

7 THE CHAIRMAN: Has a salutary effect?

8 DR. FERGUSON: A salutary side effect.

9 THE CHAIRMAN: However, would I be accurate
10 in concluding that in trying to consider the cost
11 factor of an expensive drug, as against a less expensive
12 one, that it might be difficult to come to an absolute
13 conclusion because an expensive drug might affect a
14 remedy, or cure, in a short period of time, and there
15 is some obvious economic savings in wages, hospital
16 accommodation, and so on; whereas, the less expensive
17 drug might take two or three weeks, with or without
18 loss of wages and with or without hospital accommodation?

19 DR. FERGUSON: That could certainly happen,
20 particularly in the case of the antibiotics or anti-
21 infection drugs.

22 THE CHAIRMAN: I suppose the net effect is then.
23 Doctor if we are going to consider cost of drugs,
24 that there are a lot of ifs, ands, and buts, or qualifi-
25 cations to any statement that is made on the subject?

26 DR. FERGUSON: Oh I believe that is true and
27 they tend to -- eventually the price is determined
28 by the total overall value as assessed by the user.

29 THE CHAIRMAN: Could you give us the source
30



1 of the country that supplied the unfinished imported
2 penicillin?

3 DR. FERGUSON: Well I actually don't know
4 where other manufacturers get their penicillin from,
5 or in what form. We at the moment are getting it from
6 Europe.

7 THE CHAIRMAN: Any particular country?

8 DR. FERGUSON: Is that a necessary question?
9 I mean this is the kind of thing that I would just
10 as soon not tell everybody where you are getting it,
11 because if I say it was Timbuctoo, there might be only
12 one supplier in Timbuctoo.

13 THE CHAIRMAN: The reason the question is
14 asked, and I am not making any ruling on this point,
15 is that some consideration has been given by the
16 Committee to the question of drugs from the United
17 Kingdom, France has been mentioned, Germany, Switzerland,
18 and Italy, among others.

19 DR. FERGUSON: I can tell you this, that
20 its from a country with a very high reputation for
21 quality.

22 THE CHAIRMAN: In Europe?

23 DR. FERGUSON: In Europe.

24 THE CHAIRMAN: I think for the moment we
25 will just leave that. Now there was one phrase on
26 Page 14, at the top that I am not clear on, the end
27 of the paragraph at the top of the page. You go on
28 and you say: "Under these circumstances, it seems
29 only reasonable for the Connaught Medical Research
30



1 Laboratories to rely more on its own earnings to
2 support its research, and to become a net donor
3 rather than a net recipient of research funds."
4
5 Now could you elaborate on that clause: "And become
6 a net donor rather than a net recipient of research
7 funds"?

8 DR. FERGUSON: Very early in the Connaught
9 history a certain amount of its research funds were
10 actually distributed outside, that only outside the
11 Connaught, any department of the University but if it's
12 a donor to do research in the School of Hygiene,
13 University of Toronto; it's a donor of funds to the
14 Banting and Best Department of Medical Research and
15 at the same time it's a donor to other departments
16 in the university who make application for funds to
17 the Connaught Committee.

18 THE CHAIRMAN: I take it then that you are
19 indicating that the Connaught occupies an administrative
20 position, doesn't do all its own work itself but
21 supervises the work, or some of the work for which
22 it is charged? I mean charged with responsibility.

23 DR. FERGUSON: Yes. We do, if you like to
24 use the expression, farm out some of our work to
25 help scientists across the country, in some of our
26 research projects, and we support its financially.

27 In addition, some of this financing goes
28 for work in which we are not primarily interested.
29 It's the scientist who says this is something I would
30 like to do. It isn't very closely related to your work,



1 but it might be.

2 MR. BRYDEN: How much would you spend in a
3 year sir on research (A) in your own jurisdiction
4 immediately and (B) outside? Is that readily available?
5

6 DR. FERGUSON: Well I have it in my brief-
7 case here and I would like to refresh my mind because
8 it isn't too good on figures of that kind. For the
9 last year, our expenditures of research financing
10 by the Connaught Medical Research Laboratories,
11 \$713,000.

12 MR. WHITE: What was your total sales volume?

13 DR. FERGUSON: It runs between five and
14 six million. Grants to the Department of the University
15 of \$71,000. Out of a total of our -- our total
16 expenditures on research from any funds were \$815,000.

17 MR. BRYDEN: That is including the research
18 you did yourself within your own laboratory?

19 DR. FERGUSON: Yes, that is the total, and
20 of that in grants to other universities, to other
21 departments, and fellowships amounted to nearly one
22 hundred thousand dollars.

23 Our receipts from outside sources, including
24 all grants net was \$60,000, so last year we were
25 a net donor. Does that explain --? We were a net
26 donor. I think this year our research expenses are
27 going to hit \$1,000,000.

28 MR. BRYDEN: ^Apart from these donations that
29 is financed out of the revenues you get from the sale
30 of products?



1 DR. FERGUSON: That is right.

2 MR. WHITE: Mr. Chairman, could I pursue
3 a line of questioning regarding certain activities
4 of the Laboratories?

5 THE CHAIRMAN: Yes.

6 MR. WHITE: You mentioned to the Committee
7 that you do not employ a single salesman?

8 DR. FERGUSON: That is right.

9 MR. WHITE: Would you have anyone other than
10 a salesman making contacts with retail stores, doctors,
11 hospitals, or departments of the Government? Would
12 you have technicians, let's say, or doctors on your
13 own staff?

14 DR. FERGUSON: Some doctors contact some
15 hospitals for specific purposes. We are continually
16 conducting research for one hospital or another in
17 clinical trials. We are also answering questions all
18 the time, so that we have a medical department which
19 is on the telephone, or writing, or sometimes visiting
20 various hospitals for specific purposes, but not
21 to sell drugs.

22 MR. WHITE: Nothing in the way of regular
23 visitations promoting the sale of your products?

24 DR. FERGUSON: No.

25 MR. WHITE: Would you have promotion through
26 medical conventions and that kind of thing?

27 DR. FERGUSON: Very little. Occasionally we
28 have exhibits in the means of the Canadian Public
29 Health Association, or the Ontario Medical. We do very
30



1 little of that. Many of our scientific staff did
2 scientific papers to these various means. That is the
3 way we prefer to do our publicity, if you like to
4 call it that.

5 MR. BRYDEN: I have seen --

6 MR. WHITE: Could I just conclude this?
7 Would you be able to tell us the cost of your exhibits
8 at these medical conventions?

9 DR. FERGUSON: No, that would really -- you
10 would really have to dig back into a lot of data.
11 It isn't big enough for a separate item on a consolidated
12 statement.

13 MR. WHITE: Do you do any advertising to
14 the retail druggists and the medical profession?

15 DR. FERGUSON: We do advertise in all official
16 journals, medical, and I think the pharmaceutical.
17 I am not just sure about that.

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19
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25 Page 1021 follows.
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1
2 MR. WHITE: Could you tell us the cost
3 of the promotional programme?

4 DR. FERGUSON: No, I couldn't. It is
5 pretty small.

6 MR. WHITE: Do you have a campaign to the
7 druggists or doctors?

8 DR. FERGUSON: Twice a year we mail out our
9 price lists and whenever there is a new product or
10 a change in the product we usually send that to druggists
11 and pharmacists by mail.

12 MR. WHITE: As well as publishing this
13 information in the medical journals, could you tell
14 the Committee, perhaps later, the total cost of this
15 campaign?

16 DR. FERGUSON: If you wish, I will supply
17 that to the Secretary in writing.

18 THE CHAIRMAN: On that subject, Mr. White,
19 I wonder if at the same time, Dr. Ferguson, it would
20 be convenient to file with the Committee your price
21 lists, which is a public document, and also some
22 samples of informative letters or communications which
23 are mailed out?

24 DR. FERGUSON: Yes.

25 THE CHAIRMAN: Giving some examples of
26 last year or so.

27 DR. FERGUSON: Price lists and publicity
28 and promotinal literature?

29 THE CHAIRMAN: Yes.
30



1
2 MR. WHITE: On the subject of pricing, you
3 told us that insulin was sold to the consumer at list
4 price and the druggist's cost was 25 per cent less than
5 that. Would this be true of other products?

6 DR. FERGUSON: Most other products, most of
7 which came on later, conform with the general pattern
8 of discounts. We felt that the druggist deserved
9 this discount for the service they are giving to the
10 public.

11 MR. WHITE: You say they conform to the
12 general discount pattern. Is there a standard dis-
13 count?

14 DR. FERGUSON: I don't know whether there
15 is or not, but there is one that is standard to us,
16 which is 40 per cent off.

17 MR. WHITE: You mentioned also that your
18 price is the same as the price to druggists, that is
19 25 per cent off the list price in the case of insulin.

20 DR. FERGUSON: Yes, but more to druggists
21 if there is sales tax.

22 MR. WHITE: Is the discount the same for
23 hospitals regardless of the size of the hospital or
24 the quantities that they purchase?

25 DR. FERGUSON: I believe it is with all of
26 our products. We just don't make any distinctions
27 there, and it is all delivered, from Yukon to Halifax,
28 at no extra charge.

29 MR. WHITE: Do you make an effort to maintain
30



1
2 your list price to the consumer or do you permit the
3 druggist to sell at a larger or smaller price if he
4 wishes?

5 DR. FERGUSON: We do nothing about it.
6 We don't know what goes on. I have not been on the
7 Insulin Committee very long and I don't know what the
8 story was in the old days, when this started, but I
9 understand that under licensing they were permitted by
10 law to name one price, and I think they did in some
11 cases.

12 MR. WHITE: Now, in the sales of insulin
13 and other products abroad, do you quote the same price
14 as you would domestically?

15 DR. FERGUSON: Not necessarily. Of course,
16 export business is a matter of bargaining and negotiation,
17 and it is very largely in bulk crystals, for filling
18 on the other side. So it is a matter of competing
19 with the suppliers in Europe and elsewhere for a bulk
20 price.

21 MR. WHITE: Would there be agreements
22 concerning the sale of insulin compared with other
23 products with domestic manufacturers in these foreign
24 countries?

25 DR. FERGUSON: As far as I know, there are
26 no formal agreements. There are, let's say, customary
27 channels of trade. There is a firm in Japan who for
28 years has bought insulin crystals from us. Nobody else
29 in Japan has asked for it.
30



1
2 MR. WHITE: Do the licensing costs resulting
3 from patents exclude the Connaught Laboratories from
4 purchasing some of the newer drugs?

5 DR. FERGUSON: If you respect patents you
6 do not produce a drug or sell a drug which is patented
7 in Canada or where you are going to sell it. In
8 general, we respects patents. A patent is only worth
9 what it is worth in court, and if we think it is very
10 flimsy we ignore it.

11 MR. WHITE: We were told by Dr. Morrell
12 that application could be made to the Patent Office
13 for permission and often permission was given and the
14 applicant would be directed to pay a royalty, and I
15 concluded that the patents as such do not limit the
16 production or distribution of such drugs.

17 DR. FERGUSON: I believe the patent law in
18 Canada has been very seldom invoked, and it takes many
19 years to get that compulsory licence.

20 MR. BRYDEN: I think the Commissioner had
21 five cases where they were successful.

22 DR. FERGUSON: There were five successful
23 cases.

24 MR. BRYDEN: You believe it is rather
25 difficult.

26 DR. FERGUSON: Well, the people have talked
27 to people who have tried to get it and it has taken
28 quite a bit of effort, and perhaps rightfully so.

29 MR. WHITE: If you were interested in
30



1
2 producing a drug which has recently been patented by a
3 private manufacturer, could he simply keep you out of
4 that market by quoting you a very high royalty?

5 DR. FERGUSON: Yes; he wouldn't necessarily
6 have to give it to us. In fact, we have been refused
7 a licence for something we felt was in the national
8 interest to be produced in Canada. I think he would be
9 within his rights to do so, unless we compelled him to
10 do so through the machinery of the Compulsory Licensing
11 Act.

12 MR. WHITE: Has the royalty charge pre-
13 cluded you from the field?

14 DR. FERGUSON: No, not in any cases I know
15 of. Royalties are very small nowadays.

16 MR. BRYDEN: I would like to follow up on
17 one or two points raised by Mr. White with respect to
18 the sales policy, shall I call it, in Connaught
19 Laboratories. I have seen statements by people who
20 appeared to me to be authorities in the field, medical
21 men, to the effect that an efficacious product in the
22 drug field doesn't really need much promotion; they
23 learn about it through their journals, and so on, and
24 will use it. Do you say that your experience in
25 Connaught will tend to bear out statements of that kind?

26 DR. FERGUSON: I believe that is true when
27 the advantages of any new drugs are really outstanding.
28 When the inventions are perhaps a little small, the
29 advantages debatable -- they may be good, mind you,
30 but they are not self-evident -- then it may be some



1
2 persuasion and salesmanship is needed to put it over.

3 MR. BRYDEN: Has Connaught Laboratories
4 ever put a brand name on any product they put on the
5 market?

6 DR. FERGUSON: Insulin. Insulin is a
7 proprietary name, but it was not used as such. Anybody
8 using the name insulin had to conform to the requirements
9 of the Insulin Committee.

10 MR. BRYDEN: But anyone else could use that
11 name if they conformed to the standards; they could use
12 it as a protection of quality.

13 DR. FERGUSON: Yes. In general, we try
14 to avoid inventing names other than the official names.
15 That is sometimes pretty hard to do, because we have
16 tetanus and diphtheria toxides with poliomyelitis
17 pertussis vaccines. Now, on the label we also have
18 D.P.T. polio vaccine. I think we have registered that
19 in other countries.

20 MR. BRYDEN: It is registered in Canada?

21 DR. FERGUSON: I am not sure.

22 MR. BRYDEN: You are not sure if it is
23 registered? Is it just a matter of convenient
24 designation?

25 DR. FERGUSON: Yes, we just use that name
26 on our packages. Nobody else uses it, I think. I
27 think in other countries we have actually registered
28 it. I don't remember which countries.

29 MR. BRYDEN: I take it from the general
30



1
2 import of your brief that research is dealt with by and
3 large as a cooperative effort involving many people.
4 Would that be correct?

5 DR. FERGUSON: Yes, it has been cooperative
6 practically all over the world. The idealism has been
7 probably more closely approached by the non-profit
8 institutions, but it is surprising how much freedom of
9 exchange there is between commercial establishments.
10 It is sometimes a matter of getting personally
11 acquainted with the people doing the work. But we
12 do exchange a lot of information. There is a certain
13 unwritten law in the kind of questions you shouldn't
14 ask people if they touch their pocket-books too closely.

15 MR. BRYDEN: Well, in a great many instances
16 at least it is to some degree a matter of accident
17 as to who may discover a particular thing, and to many
18 people working in the field knowledge is accumulative
19 and somebody happens to hit on something.

20 DR. FERGUSON: Many big discoveries can
21 be attributed to all the people who contributed to that
22 discovery, and yet many individuals stand out by the
23 particular brilliance of their timely contribution.

24 MR. BRYDEN: It makes me wonder about the
25 whole policy of patenting discoveries of this kind.
26 I am not criticizing Connaught's policy, which I think
27 in the context we now have is a very sensible policy.
28 But it would seem that in many cases that to give a
29 patent to a group or an individual, a company, which
30



1
2 just happens to make the last stage of discovery, shall
3 we say, and to give him, therefore, exclusive rights
4 may not be entirely supportable. Would you have
5 any comments or views on that?

6 DR. FERGUSON: I have very mixed feelings
7 about patents. Sometimes I feel one way and sometimes
8 the other. There are certain patents which are very
9 trivial, granted on very trivial inventions. There
10 are other times when you feel quite sure that the
11 inventor and the person who supported them or the
12 organization deserve some protection or financial benefit
13 from the contribution. I have not been able to find
14 out any better system -- and avoiding triviality in
15 patenting.

16 MR. BRYDEN: There are some countries which
17 don't permit patenting of drugs.

18 DR. FERGUSON: I believe that is true.

19 THE CHAIRMAN: Of course, that leads to
20 other complications, the international basis, where you
21 have a manufacturing country with a certain set of rules
22 and another manufacturing country that just ignores
23 them.

24 MR. BRYDEN: I don't know anything about
25 the experience of those countries in any case.

26 That is all I have, Mr. Chairman.

27
28 (Page 1031 follows)
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30



1
2 MR. PRICE: I have several questions,
3 Mr. Chairman, to ask of Dr. Ferguson in connection
4 with Salk vaccine. When Salk vaccine first came out,
5 I believe the Department of Health undertook to
6 administer it to all the school children in Ontario
7 and all that manufactured was from Connaught
8 Laboratories. The government paid for it. I was
9 wondering if there was any special price arrangement
10 because of the volume which was used.

11 DR. FERGUSON: There was a negotiated
12 price which was the same for all the governments of
13 Canada. It was negotiated because the Federal
14 Government said we will pay 25 cents and you, the
15 Province, will pay 25 cents, giving Connaught 50 cents
16 a dose.

17 This price was arrived at on the basis of
18 cost estimate plus allowance for risk in a very risky
19 project, and having in mind the price which would
20 likely be prevailing in the United States, which I
21 think at that time was around 75 cents. This is the
22 Government price.

23 By the time that it was available to dis-
24 tribute through druggists and drug stores, in some
25 Provinces this was done and the usual mark-up was
26 made in drug stores.

27 Since the first few years of the introduction
28 of Salk vaccine, the price has been decreased
29 successively both to the governments and to the druggists.
30



1
2 I don't think the druggists in Ontario bothered
3 stocking Salk vaccine very much because it is dis-
4 tributed free entirely. It is not true of Quebec
5 and perhaps some other Provinces too.

6 MR. RICE: There is one matter I want
7 to ask the Doctor about that I overlooked; Has the
8 Connaught Laboratory received any complaints from
9 other companies complaining that Connaught Laboratories
10 are selling products at a price which is too low?

11 DR. FERGUSON: No.

12 THE CHAIRMAN: Are there any other questions
13 from interested parties? Well, Dr. Ferguson, thank
14 you very much for coming before the Committee. I
15 like the way your brief is prepared, and presenting
16 it to us in this way it facilitates the work of the
17 Committee, and enables us to follow your presentation.
18 It may be that in the weeks ahead we would like --
19 we might ask you to come back and amplify some matters
20 which may be raised at a later date.

21 I had in mind also the possibility of a
22 visit to the Connaught Laboratories. Could that be
23 done (A) without interfering with you and, (B) without
24 getting any rare disease?

25 DR. FERGUSON: We would be very careful
26 of you to see that you didn't get into any danger
27 areas, and we would be very happy to have you visit
28 us.

29 I should point out to you now we operate
30



1
2 from three locations. We have the insulin plant
3 in this brick building, 150 College Street. We have
4 our office building and packaging and penicillin plant,
5 long empty and unused on Spadina. That is in the
6 old Knox College on Spadina Crescent. We have perhaps
7 the largest single group of structures up at Steeles
8 and Dufferin.

9 A tour might be done a half hour, quick tour
10 through the insulin plant, a half hour for going through
11 the Spadina division, and up Dufferin, maybe an hour
12 or two looking around the grounds and some of the
13 buildings there. About a half day's job and it is
14 pretty hard work.

15 THE CHAIRMAN: That might be of real
16 interest to the members of the Committee, and there is
17 no doubt the Secretary will be in touch with you.

18 Well now, this would appear to conclude the
19 sittings for today. On Monday we will hear the
20 presentation from the Canadian Pharmaceutical
21 Manufacturers Association, and observing the problems
22 that go with a Monday morning, would 11 o'clock be
23 acceptable to all the members to start?

24 MR. WHITE: I can't be here Monday.

25 MR. BRYDEN: Mr. Chairman, before you
26 adjourn, were copies of that brief to be presented?

27 THE CHAIRMAN: Yes, I believe they are
28 available. We will now adjourn.

29
30 --- Hearing adjourned.

Ken Furell

Select Committee on Drugs

HEARINGS

HELD AT
PARLIAMENT BUILDINGS
TORONTO, ONTARIO

VOLUME No.: DATE:

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1
2 SELECT COMMITTEE ON DRUGS

3
4
5 Proceedings of hearings
6 held at Parliament Buildings,
7 Toronto, Ontario, on Monday,
8 the 24th of October, 1960,
9 at 11.00 a.m.

10 COMMITTEE:

11 MR. H. L. ROWNTREE, Q.C. CHAIRMAN

12 -----
13 MR. A. WREN

14 MR. J. A. FULLERTON

15 MR. J. TROTTER

16 MR. R. E. SUTTON

17 MR. R. J. BOYER

18 MR. N. WHITNEY

19 MR. H. J. PRICE

20 MR. K. BRYDEN

21 MR. J. WHITE

22 MR. G. F. LAVERGNE
23 -----

24
25 MR. S. J. GADSBY, F.C.I.S., Secretary

26 MR. HAROLD A. RICE Committee Counsel
27
28
29
30



1
2 --- On resuming at 11.00 a.m.

3
4 THE CHAIRMAN: Gentlemen, this morning we
5 will receive the brief from the Canadian Pharmaceutical
6 Manufacturers Association. Mr. Hume?

7 MR. HUME: Mr. Chairman, thank you. For
8 the record, sir, my name is F. R. Hume. I am appearing
9 this morning as counsel for the Canadian Pharmaceutical
10 Manufacturers Association.

11 The brief will be presented by Mr. Stanley
12 N. Nesbitt Conder, who is the general manager of the
13 Association.

14 Following the presentation of the brief, with
15 the Chairman's permission, I discussed this with my
16 learned friend Mr. Rice, Doctor Brian Dixon will make
17 some comments on his Economic Analysis without reading
18 it in full, and I also would like to advise the
19 Committee that present this morning is Mr. Henry J.
20 Brown who is president of this Association, from Montreal.

21 THE CHAIRMAN: Would you like to introduce
22 them, Mr. Hume?

23 MR. HUME: Mr. Conder is the gentleman who
24 will be presenting the brief. Doctor Dixon of Queen's
25 University is on my left, and Mr. Brown is behind me,
26 sir. I should now like to call on Mr. Conder to make
27 the presentation on behalf of the Association.

28

29

30



R E P R E S E N T A T I O N

on behalf of the

CANADIAN PHARMACEUTICAL MANUFACTURERS ASSOCIATION

by

STANLEY NESBITT CONDER

General Manager

Mr. Chairman and Members of the Select Committee
on Drugs:

I am Stanley Nesbitt Conder, General Manager
of the Canadian Pharmaceutical Manufacturers Association.

With me today are:

F. R. Hume, Q.C. Hume, Martin & Allen, Toronto

General Legal Counsel, C.P.M.A.

Brian Dixon, Ph.D., Assistant Professor,
Commerce & Business Administration,
Queen's University,
Economic Consultant, C.P.M.A.

These gentlemen are serving today in their
capacities as consultants to our Association. I request
your permission to call on them for answers to questions
of a professional nature which may arise during or
following this representation.

Also presented with this brief is an independent
economic report on the pharmaceutical manufacturing
industry, prepared by Dr. Brian Dixon. This economic
report has been filed with your Committee in support of
our representation, under Appendix E. Dr. Dixon is pre-
pared to answer any questions from the Committee concerning
his report, following this presentation.



1
2 INTRODUCTION

3 The Canadian Pharmaceutical Manufacturers
4 Association was founded in 1914, and was incorporated
5 under the Dominion Companies Act in 1959. It represents
6 54 companies engaged in manufacturing and distributing
7 ethical pharmaceutical preparations in Canada. The term
8 "ethical" refers to drugs dispensed on doctor's pres-
9 cription, as different from proprietary or patent
10 medicines which are sold over the counter. As might be
11 expected, some of our companies also make proprietary
12 medicines to varying degrees, but our Association does
13 not represent this field of medication.

14 Membership in the Association is by company,
15 including both full and associate members. Full member-
16 ship comprises companies which manufacture and distribute
17 under their own name in Canada. Associate membership
18 comprises companies which do not as yet manufacture in
19 Canada, but which are subsidiaries of recognized and
20 reputable corporations. When we introduced this system
21 of membership in 1955, there were several companies in
22 the Association which might be considered suppliers to
23 the industry. These companies would not be eligible
24 today, but we permitted them to retain membership in view
25 of their many years of active participation in Association
26 affairs. Thirty per cent of our full voting members
27 are wholly-owned Canadian companies.

28 A list of the membership is attached under
29 Appendix A.

30 In preamble, I wish to thank the Committee for



1
2 giving our Association this opportunity to appear before
3 you. We requested permission to make this representation,
4 with the hope that it would be of assistance to you in
5 your deliberations and, at the same time, to present a
6 complete and factual account of pharmaceutical manufac-
7 turing in Canada. I propose to show that:

8 1. Canada's pharmaceutical manufacturing
9 industry is operating in the best public interest, and
10 and that profits are consistent with good business
11 practice.

12 2. As a supplier to the medical profession,
13 the industry has been a major factor in helping to
14 reduce human suffering and eradicate diseases and ill-
15 nesses.

16 3. Prescription drugs are one of the best
17 buys available to Canadians, that prices in general are
18 not out of line with the present standard of living, and
19 that drugs have actually lowered the cost of illness to
20 the patient.

21 4. As a result of their highly competitive
22 nature, Canadian pharmaceutical manufacturers have
23 consistently reduced prices to the lowest levels possible,
24 while maintaining quality products and promoting dis-
25 covery and growth.

26 5. That pharmaceuticals made by brand name
27 companies located in this country afford Canadians the
28 greatest single assurance of the finest and most effective
29 medication available.

30 6 While drugs represent but a small



1
2 percentage of the total health bill, their cost in
3 relation to medical and hospital expenditures in general
4 has been distorted to the detriment of Canada and its
5 citizens.

6 7. And, finally, that the future of Canada
7 as a leading scientific nation in the field of medicine
8 depends largely upon a strong, competitive and growing
9 domestic pharmaceutical manufacturing industry.

10 Within this scope, I shall refer to the industry
11 and the companies within our Association as a whole.
12 You will appreciate that I cannot speak on behalf of any
13 individual company, nor am I in a position to discuss
14 pricing or trade practices of any firm or its products.

15 THE ROLE IN DISCOVERY

16 As Dean Norman Hughes stated in his excellent
17 report before this Select Committee on June 14: "The
18 pharmaceutical industry ... has played an increasingly
19 important role in the research for new and even better
20 drugs." 1/

21 The Hinchcliffe Committee's report to the U.K.
22 Ministry of Health stated that, following Waksman's
23 discovery of streptomycin under a drug company grant,
24 "... all subsequent antibiotics have been discovered by
25 scientists working in the laboratories of pharmaceutical
26 firms." 2/

27 Dr. James Watt, Director of the National Heart
28 Institute stated: "The major studies in drug discoveries
29 of the past few years ... have been made within commercial
30 pharmaceutical houses." 3/



1
2 It would take a book in itself to explain in
3 detail the countless life-saving developments which have
4 come from the laboratories of pharmaceutical companies.
5 The preceding statements by eminent authorities in
6 Canada, the U.K. and the U.S.A. are but a few opinions
7 of the pharmaceutical research undertaken by private
8 enterprise. It is an accepted fact in the field of
9 medical science that the pharmaceutical manufacturers
10 throughout the world who are prepared to stand behind
11 their names and products have a record of scientific
12 achievement unparalleled in modern business, medical or
13 social history.

14 It is a matter of public record that these
15 companies have produced more than two dozen antibiotics
16 for the fight against infectious diseases, more than 25
17 major tranquilizers to combat mental illness, 12-15
18 major steroids now being used against inflammatory diseases,
19 20 compounds for use in various treatments of cancer,
20 and more than 30 drugs for use against heart disease,
21 among others.

22 Since the advent of the steroid era, more than
23 20,000 steroid substances have been synthesized by
24 pharmaceutical companies. Of these, only about a
25 dozen have proved successful commercially and, because
26 of continual improvement, the rate of replacement has
27 been high. In another field, after thousands of failures,
28 the industry finally produced the broad spectrum anti-
29 biotics, commencing with Aureomycin and Chloromycetin
30 in 1947, Terramycin in 1949, Tetracycline and



1

2 Erythromycin in 1953, Oleandomycin and Novobiocin in
3 1958, and Declomycin and Syncillin in 1959.

4 The results of the tranquilizers and anti-
5 depressants in the field of psychiatry are now well
6 known, and we take for granted the better analgesics and
7 improved muscle relaxants which have also resulted from
8 the laboratories of pharmaceutical manufacturers.

9 The improvement in diagnostic agents has been
10 a boon to the medical profession. Also, we now have
11 dozens of new pharmaceuticals for the control of high
12 blood pressure, and older drugs used to reduce body
13 fluids have fallen before the more predictable and
14 effective diuretics. New preparations based on con-
15 centrations for use in atherosclerosis and amino acids
16 in mental deterioration, are continually being studied
17 and improved in pharmaceutical laboratories.

18 Probably less dramatic, but certainly no less
19 important to thousands of Canadians, are other drugs
20 developed by the industry to help counteract certain
21 deficiencies in people who otherwise are not technically
22 ill. In contrast to the pharmaceuticals previously
23 mentioned, these drugs supplement dietary problems,
24 improve strength or give some measure of physical relief.
25 One of the best examples of these is the vitamins.

26 According to the internationally-known
27 pharmaceutical consultant, Paul de Haen, pharmaceutical
28 companies marketed from 1950 to 1959, 415 new single
29 chemicals. These were new single chemical entities not
30 previously known. In addition, these companies also



1
2 marketed 2,372 compounded substances, which consisted of
3 products having more than one active ingredient. In
4 1959 alone, 63 new chemical entities were made available
5 by the pharmaceutical industry. Of these, 20 or 31.7
6 per cent came from Europe or were marked by firms in
7 North America which are owned abroad. The remaining
8 43 new chemical entities, or 68.3 per cent, were developed
9 in North America. 4/

10 Nor was the development of these products a
11 simple matter from the standpoint of scientific skill and
12 cost. The law of averages in finding a new therapeutic
13 substance is one in 2,865. In 1958, the U.S. industry
14 worked on 114,600 different chemical substances in its
15 laboratories. However, only 1900 of these potential
16 drugs reached the stage of clinical investigation on
17 humans. It has been estimated that probably less than
18 40 of these became prescriptions, which is a ration of
19 one in 2,865. 5/

20 Granted, there is some duplication of effort
21 in the research and development projects being under-
22 taken by the various companies, but this is a direct
23 result of the competitive factor which is a trait of
24 this industry. If you have 20 companies working on a
25 substance for cancer, then the odds of finding a cure
26 are 20 times greater than if this work were limited to
27 one company. Rarely do two pharmaceutical laboratories
28 follow precisely the same line of reasoning in product
29 research, and it is this difference of opinion and
30 competitive effort which has produced the mushroom of



1
2 pharmaceutical discovery as we now know it.

3 When one company does find the solution and
4 markets its product, the other 19 have in effect lost
5 the race. They can fold their efforts on that line of
6 investigation, and amortize the cost over their other
7 marketable products. Or, which is more often the case,
8 they can concentrate even harder on their line of reason-
9 ing with the hope that they will come up with a better
10 drug. As an example of the cost involved, one U.S.
11 company recently stated that it estimates the total
12 cost to date of its work on products that have not turned
13 out successfully, is approximately \$37,000,000. And
14 this is but one firm 6/

15 I mentioned earlier that pharmaceutical manu-
16 facturers marketed a total of 2,787 new single and
17 compound products from 1950 to 1959. During this same
18 period, they introduced 796 duplicate single products.
19 There are many reasons for this. In some cases, a man-
20 ufacturer develops a competing drug to sustain his
21 sales which are the very basis of his high-risk research
22 and development programs.

23 In other cases, he is trying for a new im-
24 provement over an existing drug. Products of the same
25 general grouping often vary according to effectiveness
26 and toxicity or side effects. For instance, one drug
27 may be more effective than another, yet it may also
28 have more side effects. In selecting a drug, a
29 physician must decide whether the patient's condition
30 is serious enough to warrant use of what might be termed



1
2 a more effective drug. At the same time, the physician
3 must also determine whether the patient can tolerate
4 the side effects involved.

5 As an example of this, the next page contains
6 a chart listing fifteen psychopharmacological agents
7 used in psychiatry and available in Canada. Seven of
8 these drugs are used for both psychosis and neurosis,
9 two are for both neurosis and depression, one for
10 psychosis alone, two for neurosis alone and three for
11 depression alone. While of the same general family,
12 these drugs nevertheless have five different applications.
13 More important, the chart shows the complications or
14 side effects peculiar to each drug. 7/

15 Almost 45 per cent of the prescriptions written
16 today could not have been filled five years ago, because
17 the drugs did not exist. The obsolescence rate on
18 pharmaceutical products is extremely high as a direct
19 result of the continuing efforts of manufacturers to
20 find a better and more competitive product.

21 The classic example of this is cortisone.
22 When cortisone was isolated in the Mayo Clinic in 1935,
23 it was turned over to a pharmaceutical manufacturer for
24 synthesizing. After 14 years work, the company finally
25 found a solution to the problem. This was a costly
26 36-step process, using animal bile. The product was
27 placed on the market.

28 In 1952, two different companies announced a
29 fermentation process and an economical synthesis,
30 respectively, for producing cortisone. Almost immediately,



a fourth company reported success with a pure form of ACTH, the adrenocorticotrophic hormone which stimulates the adrenal gland to produce cortisone.

* Nonserious side effect occurring rarely.

† Nonserious side effect occurring relatively frequently.

‡ Potentially serious complication or problem.

Complications or
Side Effects

PSYCHOSIS AND NEUROSIS

"Vesprin" (Squibb)

"Dartal" (Searle)

"Sparine" (Wyeth)

"Trilafon" (Schering)

"Harmonyl" (Abbott)

"Stelazine" (SKF)

"Mellaril" (Sandoz)

NEUROSIS AND DEPRESSION

"Ritalin" (Ciba)

"Equanil" (Wyeth)

PSYCHOSIS

"Pacatal" (Warner)

NEUROSIS

"Atarax" (Pfizer)

"Suvren" (Ayerst)

DEPRESSION

"Benzedrine" (SKF)

"Tofranil" (Geigy)

"Nardil" (Warner)

Anticholinergic Effects	Behavioral Toxicity	Blood	Extrapyrarnidal Syndromes	Hyperreflexia, Etc.	Hypotension	Liver	Peripheral Edema	Seizures	Skin
		*	†		†			*	
			†						
		‡			‡	†		‡	*
			†		*			*	*
	*				*				
			‡		*			*	
*	*				*				
*	*			*					
		‡							*
		‡				†			
	*								
		‡		†					
†	*	*	*	*	†	*	*	*	*
*	*				*		*		

Ref: Psychopharmacology Service Center,
National Institutes of Mental Health.



1
2 In 1953, a fifth company found a series of
3 cortisone derivatives, some of which were more active
4 biologically than cortisone itself. Two months later,
5 a sixth company with laboratories in Mexico, disclosed
6 it had found a low-cost process for producing cortisone
7 from Mexican yams. Then a seventh company announced
8 still another practical synthesis of the hormone.

9 This eventually resulted in a variety of
10 products some with different actions, and more economical
11 methods of producing the drug in quantity. The net
12 result was that within two years, the price of cortisone
13 dropped almost 90 per cent. And the original company
14 which had produced the first synthesis, and with it the
15 first practical application of production in quantity,
16 lost 14 years work and a considerable investment.

17 Surprisingly, discovery is not by itself the
18 end result of medical research. Equally important,
19 is finding the means of mass-producing the drug in
20 quantity to make it available to medical practitioners
21 everywhere, and this is one of the vital roles of the
22 pharmaceutical industry. The most expensive drug in
23 the world is the one which lies idle in the laboratory.
24 This was typical of penicillin, which remained dormant
25 for some 15 years before the pharmaceutical industry,
26 with wartime government support, found a means of
27 producing the first antibiotic in quantity. Incidentally,
28 in respect to penicillin development, the industry put
29 up three times more money than the U.S. government did
30 on this crash program, in addition to supplying almost



1
2 all of the experience and intellectual resources
3 required. 8/

4 By the very nature of the business, pharmaceutical
5 manufacturers must keep steadily increasing their
6 efforts in the pressing race for still newer and better
7 medical products, in order to maintain the competitive
8 position so essential to the companies' future growth,
9 and the health of generations yet to come.

10 CONTRIBUTION TO PUBLIC HEALTH

11 I now wish to explore the contribution this
12 discovery has made and is making to the public health
13 in Canada. As my first reference, I wish to offer a
14 public statement made by the late Hon. Brooke Claxton,
15 Vice-President and General Manager of the Metropolitan
16 Life Insurance Co., at the close of 1959: "As the 1950's
17 come to a close, we should take note of the marked
18 health progress made during the decade. Particularly
19 noteworthy have been the gains made against infectious
20 diseases, resulting in a large measure from the use of
21 the antibiotics.

22 "Marked gains have been made in reducing
23 infant mortality. The ... rate was about 30 per 1,000
24 live births in 1959, a decrease of nearly one-third
25 since 1949. Even more rapid has been the reduction of
26 maternal mortality, the rate in 1959 being about 0.5
27 per 1,000 live births. The savings in lives resulting
28 from these favourable trends have been especially large
29 because of the record number of births in recent years.

30 "The chronic diseases of middle and later



1
2 life comprise the major health problems of the Canadian
3 people. The diseases of the heart and arteries are
4 responsible for nearly half the total mortality. Cancer
5 ranks second as a cause of death. A great deal of
6 research is now under way to determine the causes, and
7 the methods of preventing and treating these diseases.

8 "With the accelerated pace of medical research
9 and the continued rise in our standard of living we can
10 look forward to further progress in the health of the
11 nation." 9/

12 The Pulse of Modern Medicine of Canada
13 recently conducted a mortality study of 16 major diseases
14 over a 15-year period ending 1957. The results showed
15 that some 13,000 Canadians died of these diseases, which
16 was a decline of 62 per cent over the period. At the
17 mortality rates prevailing 15 years earlier, some 34,000
18 people would have died in 1957. This meant then, that
19 21,000 Canadians were alive in 1957 as a result of some
20 phenomenal good furtune.

21 In commenting on the factors which contributed
22 to this "good furtune", the editor of the publication
23 offered: " ... a greater pre-disposition to visit the
24 doctor earlier; greater emphasis on the role of
25 nutrition; wider use of vitamins and other nutritional
26 supplements and new insights and techniques available
27 to the physician. New pharmaceutical products -
28 particularly antibiotics and biologicals - have played
29 a major role (perhaps the major role) in the advance
30 against these diseases." 10/



1
2 In the 15 years through 1957, the death rate
3 from typhoid fever dropped 93 per cent; tuberculosis,
4 85 per cent; whooping cough, 85 per cent; bronchitis,
5 72 per cent; influenza, 65 per cent; measles, 45 per cent;
6 pneumonia, 39 per cent; diabetes mellitus, 57 per cent;
7 and, anaemias, 49 per cent, to name but a few. 11/

8 While vaccination for immunization against
9 typhoid fever was used extensively during World War II,
10 there was no essential change in the mortality of the
11 disease from 1847 to 1947. In 1947, however,
12 Chloromycetin was discovered and this led Arthur L.
13 Bloomfield to state in his book, A bibliography of
14 Internal Medicine - Communicable Diseases: "Thus
15 typhoid fever at long last has been to a large extent,
16 mastered by medical science."

17 In the early 1900's, McCrae described having
18 seen more than a thousand cases of scarlet fever a
19 year at the Alexandra Hospital in Montreal, with a death
20 rate of 8.7 per 100 cases. 12/ Treatment remained
21 largely unchanged until the dawn of the antibiotic era.
22 Physicians who graduated prior to World War II will
23 remember countless cases of classical scarlet fever
24 during their internships. Antibiotics have made this
25 disease so rare that some present graduates may not have
26 even seen a case of scarlet fever.

27 In the period from 1950 to 1959, the
28 mortality rate of pernicious anaemia dropped 65 per cent.
29 13/ At one time, before liver therapy was understood,
30 pernicious anaemia was fatal. In many patients, death



1
2 occurred in one to three years, although occasionally
3 a patient would live as long as 20 years.

4 In the initial stages, whole liver was used
5 to produce remission in pernicious anaemia. However,
6 this required the patient to consume unpalatably large
7 amounts of liver. The pharmaceutical industry
8 subsequently produced various liver concentrates, and
9 overnight the prognosis in pernicious anaemia was
10 revolutionized. But two problems existed: The concen-
11 trates were required in large volume, and they often
12 produced hypersensitivity.

13 In 1948, the pharmaceutical industry isolated
14 and manufactured vitamin B₁₂ which has largely replaced
15 the use of liver extract in pernicious anaemia. Not
16 only is the vitamin cheaper, but it can be used in
17 smaller amounts, and sensitivity reactions are most
18 unusual. This vitamin is presently administered by
19 injection.

20 Recently, new preparations called vitamin B₁₂
21 with intrinsic factor concentrate have been developed
22 for oral use, but creation of antibodies to intrinsic
23 factor has so far limited the duration of usefulness
24 to the patient. This problem is now being worked on in
25 the laboratories of the pharmaceutical companies, and
26 we should soon realize a successful oral treatment for
27 pernicious anaemia.

28 As I mentioned earlier, cancer now ranks
29 second as a cause of death and the medical treatment of
30 malignancies has become of prime interest to the drug



1
2 companies. At present, surgery is the main source of
3 treatment. However, surgery has now been improved
4 through advancements in anaesthesia, and the control of
5 infection by a variety of antibiotics. In fact, Hussar
6 & Holley consider that no field of medicine has bene-
7 fitted more from the new antimicrobial agents than
8 surgery. 14/

9 In addition, certain tumors are now being
10 treated with pharmaceuticals in place of surgery, and
11 the side effects of radiotherapy which can prove serious
12 to the patient are often combatted with anti-emetic
13 drugs. About five years ago, the corticoids were found
14 useful in treating certain elements of carcinoma, but
15 again side effects produced problems. The continuing
16 change in steroids, however, is gradually overcoming
17 this problem of toxicity permitting, in some cases,
18 larger doses of the drug. New compounds have been
19 found which have marked anti-tumor effects on animals,
20 but which prove too toxic for human use, the main bugaboo
21 in most areas of pharmaceutical investigation.

22 The use of radio-isotopes on malignancies has
23 gained considerable headway over the past decade, and
24 some of our scientists believe that this may eventually
25 lead to the discovery of new drugs. Pharmaceutical
26 companies are using radio-isotopes in research work,
27 and a proportionate share of exploration in this com-
28 paratively recent field is being done in Canada.

29 Some medical authorities feel that there will
30 never be a single cure for cancer, but that a combination



1
2 of surgery, radiotherapy, chemotherapy and/or hormone
3 therapy will eventually produce a solution. In any
4 event, many scientists are of the opinion that this will
5 be one of the next major breakthroughs in the field of
6 pharmaceuticals, and a considerable amount of research
7 is being done in this area at both the pharmaceutical
8 company and university levels. With hope in mind,
9 screening of new substances by pharmaceutical companies
10 now invariably includes checks for anti-tumor effects.

11 It was recently reported that about 50,000
12 clinical compounds in respect to cancer are being
13 tested annually, and that clinical trials of some 110
14 drugs are now under way on more than 8,000 patients. 15/
15 The answer will eventually be found. It is now a matter
16 of time.

17 Treatment of tuberculosis in Canada underwent
18 a radical and dramatic transition following the intro-
19 duction of streptomycin in 1946 and more recent drugs.
20 It has been reported that one in four discharges from
21 hospitals in 1947 was by death, while in 1957 this had
22 dropped to less than one in 20. Modern pharmaceuticals,
23 combined with improved surgical procedures have produced
24 a miracle in the treatment of this disease. 16/

25 As a result of our modern way of life, mental
26 illness has become one of our most serious problems.
27 Until the advent of the tranquilizers, or ataractic
28 drugs as they are known in the industry, little could be
29 done for the psychotic patient. Lucid moments were then
30 made possible by insulin shock or electric shock



1
2 treatments, so that psychotherapy could be applied.
3 But insulin shock therapy involved putting patients
4 into a coma, and some could not be given this treatment
5 for medical reasons. Others did not respond to it.

6 Electric shock proved more successful, but
7 it carried with it the hazard of spinal fractures,
8 suspensio~~n~~n of breathing, loss of memory and terror on
9 the part of the patient. In the most severe cases, a
10 third form of surgical treatment, called prefrontal
11 lobotomy, was occasionally used. This often had dramatic
12 results enabling the patient to return home and function
13 in a social framework, but at the cost of his creative
14 imagination, his ambition, his drive and, in fact, his
15 personality.

16 The development of the ataractic drugs over
17 the past decade has provided a completely new way of
18 reaching the psychotic patient. Not cures in themselves,
19 they nevertheless help the psychiatrist to reach and, in
20 some cases, to rehabilitate the mentally ill.

21 Over the past year or two, some physicians
22 have been expressing alarm at the growing number of
23 fatalities resulting from penicillin-resistant germs
24 or staphylococci, and I recall one pharmaceutical
25 company executive urging in April of this year the "the
26 need for improved antibiotics is obviously imperative"
27 to combat this problem. 17/ A British pharmaceutical
28 laboratory recently has developed a new type of
29 penicillin which is capable of killing germs resistant
30 to the earlier penicillins.



1
2 And so the parade of pharmaceutical substances
3 continues to progress, contributing to the public health,
4 and adding to its record of having placed more life-
5 saving drugs in the hands of the average man during the
6 last decade than all of the government-controlled systems
7 in the world combined. As the Pulse of Modern Medicine
8 of Canada stated: "Far fewer Canadians are dying of
9 infective and respiratory diseases, appendicitis and
10 diabetes. Thanks to new techniques and new products for
11 treating these diseases, recovery is earlier. Thousands
12 of Canadians living today owe their lives to the new
13 medical insights, new techniques and new therapeutic
14 agents discovered in the past 15 years." 18/

15 THE REDUCED COST OF ILLNESS

16 At the close of World War II, people were
17 saying: "If the country would only spend as much on
18 research for life as it did on research for death."
19 Since then, pharmaceutical manufacturers have spent
20 phenomenal amounts of money in doing just that. From the
21 health standpoint, Canadians are better off today than
22 ever before in their history.

23 As a result of modern scientific and technolo-
24 gical advances in medicine, it now costs the average
25 Canadian more to die than for medical care to stay alive.
26 Funeral directors' fees, embalming services and casket
27 alone average \$700-750 in the Toronto area, and this does
28 not include the monument or plot of ground. 19/

29 Until the early 1930's, it cost the pneumonia
30 victim at least this amount to stay alive, as a result



1
2 of loss of earnings and medical costs, and even then the
3 mortality rate was high. In those days, therapy comprised
4 bed rest, constant nursing care and a variety of simple
5 drugs for the relief of cough or pain, plus poultices
6 or mustard plasters, hot water bottles and possibly a
7 steam kettle to moisten the air in the sick room. The
8 cost was high and the mortality rate was high.

9 Today, most cases of pneumonia can be treated
10 at home easily, safely and effectively with antibiotics
11 at a cost, in some cases, of about \$15. And the cost
12 of these antibiotics is only a fraction of what it cost
13 to have pneumonia in the early 30's, and the resulting
14 therapy which was largely hope. This transition has
15 occurred within the life span of everyone in this room
16 with the exception of the ladies. It now costs less to
17 stay alive today than ever before, and considerably less
18 than it costs to die.

19 Through its constant research and development
20 programs, and its mass-production facilities which place
21 new drugs in the hands of the medical profession
22 immediately they are available, the drug industry is
23 playing a major role in maintaining the health of the
24 nation. By lengthening life span and shortening
25 mortality, pharmaceuticals have indeed produced the
26 modern version of the Fountain of Youth. They have
27 helped the medical profession to reduce the overall cost
28 of illness to the patient, through less time spent in
29 the hospital, less time spent in illness and less time
30 spent away from the job.



1
2 It now costs the average Canadian less to be
3 sick today than ever before. Furthermore, the increase
4 in wages has outstripped the increase in drug costs
5 thereby enabling the Canadian worker to buy more drugs
6 with less work. 20/

7 And the economic benefits to the nation
8 resulting from this are incalculable. The success
9 achieved in the battle against tuberculosis alone has
10 been such that patients who previously would have spent
11 years in sanatoria are now living useful, productive
12 lives. Instead of a burden to the community, they are
13 gainfully employed contributing to the tax income. By
14 the same token, the ataractic drugs have contributed
15 largely to the revolution that is underway in our mental
16 hospitals. Here again the average duration of hospital
17 stay has been reduced considerably.

18 The committee headed by Sir Charles Hinchcliffe
19 in Britain urged that greater emphasis be placed on the
20 benefits that have derived from modern pharmaceuticals.
21 It was pointed out that thousands upon thousands of beds
22 have been emptied, that the duration of hospital stay
23 and incapacity has been greatly reduced, as a result of
24 modern drug discoveries. When one considers the
25 suffering and personal distress brought about by in-
26 fections, the cost of treating the patient dwindles
27 into insignificance. 21/

28 The next point to consider in the reduced
29 cost of illness, is the relationship of medical care
30 costs in Canada with those of other nations, and the role



of drugs in this respect.

According to a study recently published by the International Labour Organization, a United Nations agency, Canada offers its people one of the lowest medical care costs in the world. Comprising an analysis of both publicly and privately financed health care in 11 countries for the year 1955, the study shows that total medical care costs in Canada are lower than in the United States, England and Wales, France, Norway, Denmark, West Germany, New Zealand, Belgium and Italy.

The only country in the study which showed a lower percentage cost was the Netherlands and, as you will notice from the following chart, we were indeed a close second. Total expenditures in the survey included hospitalization, doctor's fees and drugs, and the cost of care was computed first on a national basis and then converted into a percentage of the average income.

<u>Country</u>	<u>Cost</u>
Netherlands	1.51%
Canada	1.57
Italy	1.66
Belgium	1.70
New Zealand	1.74
United States	1.79
Denmark	1.82
England and Wales	1.87
Norway	1.91
France	1.98
West Germany	2.15



1
2 In reporting on the results of the study,
3 it was stated: "The present study does not bear out the
4 commonly held belief that there is a general tendency
5 for all medical costs to rise. It rather indicates that
6 they have not risen any faster than national income ...
7 although hospital costs show a certain tendency to
8 outstrip the rest." 22/

9 If Canada has such a low average cost for
10 medical care, then what is the relationship of drug
11 prices in respect to other elements in the health care
12 picture?

13 Significantly, drug prices in Canada have
14 shown a smaller increase on the consumer price index
15 than any other single element of health care. At the
16 end of 1959, the consumer price index for all commodities
17 was 126.5; the index for hospital rates was 204.7; that
18 for physician's fees was 141.7; prepaid medical care
19 plans, 168.5. The overall index for health care was
20 154.5. Yet the index for drugs was only 124.1, repre-
21 senting the lowest increase of all. 23/

22 It appears, then, that the effectiveness of
23 modern drugs has reduced the cost of illness to the
24 patient, and helped the economy of the family and the
25 nation. Medical care costs in Canada are lower than
26 those of many other nations, and yet drugs have remained
27 the lowest item in the health care picture.

28 THE PRICE OF DRUGS

29 In 1935, Dr. James Warbasse wrote: "Inadequate
30 knowledge of the facts of medicine possessed by society



1
2 leads people into costly errors." This is the crux of
3 complaints about the so-called high cost of drugs. The
4 fact of the matter is that people do not like being ill,
5 or, even less, having to pay for that illness. At the
6 same time, they cannot be expected to know the behind
7 the scenes story of the pharmaceuticals their doctors
8 prescribe.

9 It takes only seconds to say that "drugs cost
10 too much", but it takes hours to explain the economic
11 and scientific factors involved. We have now considered
12 their value and relationship to other elements of health
13 care. As a further step towards clarification, let us
14 take a look at the cost of drugs in general.

15 The cost of producing drugs has increased over
16 the years, but so has everything else. It now costs
17 our companies more to buy the materials with which to
18 manufacture the drugs, production and quality control
19 equipment has increased in price, and the thousands of
20 employees in our pharmaceutical laboratories are making
21 higher wages than ever before. And it is an economic
22 fact of life that when costs increase, they must be
23 absorbed or affect the price of the product. This
24 applies in any business.

25 The significant point, however, is that the
26 rise in the DBS consumer price index for drugs is not
27 out of line with that of other consumer products, and
28 less than many. During the 20-year period from 1939 to
29 1959, the drug index increased only 45.1 percent, and
30 this was much lower than that for any other single



1
2 element of health care. Compare this with the percentage
3 increase in other items for the same period, such as
4 milk at 110.6 per cent, bread at 147 per cent, butter
5 at 143.3 per cent, round steak at 297.4 per cent, men's
6 haircuts at 238.2 per cent, newspapers at 104.2 per cent,
7 and street car and bus fares at 112.1 per cent, among
8 others. 24/

9 The price indexes of these essentials all
10 increased more than that for drugs. Yet it was during
11 this very period that the pharmaceutical companies
12 introduced the countless new antibiotics, biologicals,
13 ataractics and other therapeutic substances which are
14 now taken for granted.

15 Unlike more stable products, however, the life
16 span of a drug product may be comparatively brief. An
17 effective improvement invariably makes an existing drug
18 obsolete, and most companies work constantly to turn
19 out a better product than the one they have on the market,
20 to ensure that the competition does not get the edge on
21 them. As a result, the turnover of drugs is extremely
22 high compared to other consumer products.

23 This presents a problem in comparing the rise
24 or fall of prices over a given period of time. For
25 instance, the DBS price index shows that drugs increased
26 45.1 per cent over a 20-year period. Yet, as was pointed
27 out, almost 45 per cent of the prescriptions written
28 today were not available as recently as five years ago.

29 New drugs placed on the market may at first
30 carry a higher price in order to contribute to the



1
2 heavy costs involved in producing and introducing drugs.
3 As time progresses, prices drop. Consequently, while
4 the consumer price index shows an increase for drugs,
5 small as it is, this does not necessarily mean that all
6 prices are steadily rising. In many cases, some prices
7 are actually declining for, as a result of competition,
8 price cuts are the historical rule in pharmaceutical
9 manufacturing.

10 In preparing for this representation our
11 Association retained an accounting firm to conduct a
12 series of statistical surveys of our companies. In these
13 surveys, the companies were asked individually for a
14 sampling of price reductions over the years. From the
15 hundreds of examples submitted, 90 products were
16 selected at random in view of space limitations, and
17 are attached to this brief in Appendix B.

18 The products concerned have been numbered,
19 and this is the manner in which I would prefer to have
20 them entered in the record. However, for the confiden-
21 tial information of the Committee, I now wish to turn
22 over to the Chairman a check list containing the names
23 of the products concerned and their reference numbers.

24 It will be noted from the Appendix that the
25 percentage decreases in price are, in most cases,
26 substantial. I offer this exhibit as evidence that
27 pharmaceutical manufacturers in this country do reduce
28 prices.

29 According to an economic study of prescription
30 prices in Canada in 1959, the average Canadian spent



1
2 only \$7.50 of his personal expenditure on prescription
3 drugs last year. In direct relation to prescriptions,
4 he spent five times as much on tobacco, four times as
5 much on radio and television sets, eight times as much
6 on automobile operation, and saved 14 times as much as
7 he spent on prescribed drugs. 25/

8 Obviously, drugs are but a small part of the consumer's
9 purchases during the year.

10 We hear much about the cost of the more
11 expensive drugs, yet the facts show that these are only
12 a small percentage of prescriptions. According to a
13 national survey, the average cost of a prescription
14 in 1958 was \$2.78, while in 1959 it was \$2.98. Of all
15 drugs prescribed in 1959, 46.3 per cent cost \$2.00 or
16 less while 58.8 per cent were under \$3.00, and 88.6 per
17 cent under \$5.00. Only 11.4 per cent cost more than
18 \$5.00, while 1.1 per cent cost more than \$10.00. 26/

19 To summarize, drug prices have not risen as
20 much as other segments of health care, they have not
21 risen as much as many consumer essentials, they represent
22 but a small part of the consumer's annual purchases,
23 and the pharmaceutical companies are continually lowering
24 these prices.

25 THE INDUSTRY IN GENERAL

26 According to the Dominion Bureau of Statistics,
27 Canada's medicinal and pharmaceutical preparations
28 industry comprised 196 manufacturing establishments in
29 1958. This includes manufacturers of both ethical
30 pharmaceuticals and proprietary medicines. Because many



1
2 of the firms are small regional concerns, and in view
3 of certain product overlapping, it is difficult to
4 arrive at an exact breakdown between ethical and
5 proprietary companies.

6 From experience, however, I would venture that
7 about 70 are multi-line ethical pharmaceutical manufac-
8 turers, as we understand the term, about 75 are multi-
9 line proprietary manufacturers, and the balance are
10 agents, wholesalers and retailers who also manufacture
11 some medicinals plus packaging concerns and other
12 suppliers. In addition, there are also a considerable
13 number of companies and individuals which import
14 pharmaceuticals into Canada, but DBS does not include
15 these firms within this definition.

16 In 1958, these 196 companies shipped in Canada
17 a total of \$155,000,000 worth of pharmaceuticals,
18 proprietaries and certain other lines such as toiletries
19 which are a secondary part of their business. DBS
20 shows the actual production of medicinals, pharmaceuticals
21 and biologicals for 1958 as \$139,600,000 plus imports
22 of \$29,200,000, for a total of \$168,800,000. It is
23 further estimated that proprietary medicines account for
24 approximately 22 per cent of this total which means that
25 Canadian manufacturers and importers supplied in the
26 neighborhood of \$131,664,000 worth of ethical
27 pharmaceuticals and biologicals for both human and
28 veterinary use in 1958.

29 Contrary to popular belief, no mere handful
30 of companies controls the pharmaceutical and medicinal



1
2 manufacturing business in Canada. As Dr. Brian Dixon
3 points out in Appendix E, the top 37 companies accounted
4 for 84 per cent of the volume and 53 companies for 90
5 per cent. The remaining 10 per cent of the business
6 was shared by 143 firms.

7 This ratio has remained fairly constant since
8 1955, and the comparatively low concentration in respect
9 to other industries further strengthens the highly
10 competitive nature of pharmaceutical manufacturing in
11 Canada. Incidentally, the fact that 143 firms share
12 only 10 per cent of the market does not necessarily mean
13 that they are small in relation to the areas they service.
14 While small in comparison to the larger national
15 companies, many of these firms are regional in character
16 and their respective sales volumes in the area they supply,
17 are often comparatively high in relation to the
18 larger companies.

19 As might be expected, pharmaceutical manufac-
20 turing is considered by economists as a growth industry.
21 This has been the result of the revolution in medicine
22 over the past two decades and the continual change,
23 development and discovery of drugs. A company intro-
24 ducing a major new product to the market for the first
25 time will undoubtedly realize a considerable jump in
26 sales during the first one or two years.

27 As competitive products appear, the sales of
28 the first company start to account for a smaller per-
29 centage of the market. This continuing process results
30 in an up and down movement in sales for the individual



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THE CHAIRMAN: Will you comment on the items that are considered, Mr. Conder?

MR. CONDER: This particular survey in 1959 was compiled from reports submitted by 43 companies, and those 43 companies would represent approximately 83% of our total membership.

The 1959 survey comprises 43 companies, whereas the 1958 survey comprises 28 companies.

MR. WREN: What was the name of the company that prepared these figures?

MR. CONDER: Henry Glover and Company.

THE CHAIRMAN: Of Toronto, Ontario?

MR. CONDER: Of Toronto. The total income was \$130,755,546. Wages and salaries in relation to these were about 22.8%. The profit after taxes includes both the dividends and the amount retained in the business, 46.2%. These 43 companies employed 6,446 people over the area.



1
2 company. As a result, a company in first or second
3 place this year might conceivably find itself in fifth
4 or sixth place next year. There being no monopoly on
5 discovery, a medium-sized company today could find that
6 it has become a major concern by next year. With the
7 rising tempo of discovery, it is becoming increasingly
8 difficult for even a big company to maintain its
9 position in the market and, while pharmaceutical manu-
10 facturing itself may be a growth industry, the rate of
11 growth does not necessarily apply to individual companies
12 on an equal basis.

13 I might add that this constant fluctuation in
14 products is the primary reason why it is not economically
15 feasible to judge a company's performance by one or two
16 of its large-volume products. If experience is any
17 criterion, the sales of these products could plummet
18 overnight, thereby changing the company's entire
19 financial picture. Again, high-volume products must
20 help support low-volume products and there are a con-
21 siderable number of these in the catalogues of most
22 companies. Accordingly, when looking at a company's
23 finances, we must necessarily base our findings on the
24 firm's overall operations and not on one or two drugs
25 which could be transitory in nature.

26 Referring again to Dr. Dixon's report, the
27 industry's growth is particularly significant when
28 compared to its prices, which we have reviewed earlier.
29 The industry's performance indicates that its sales
30 growth has been substantially one of physical increase



1
2 in product sales rather than in price increases. In
3 other words, the growth is a result of an increased use
4 of pharmaceuticals created by discovery, rather than
5 higher prices for essentially the same products.

6 It is estimated that there are now some 9,000
7 Canadians employed directly by companies manufacturing
8 pharmaceuticals in Canada and that the salaries and wages
9 paid to these employees annually is about \$35,000,000.
10 While not a large industry, pharmaceutical manufacturing
11 nevertheless is a substantial employer.

12 As is borne out in Appendix E, wage payments
13 per worker in the pharmaceutical manufacturing industry
14 have risen more rapidly than for the manufacturing
15 group as a whole. This is caused by the large pro-
16 portion of skilled personnel required in pharmaceutical
17 manufacturing. Like other segments of secondary industry,
18 this one is also being affected by imports from other
19 countries. While this has not as yet resulted in any
20 large-scale drop in overall employment, there are
21 nevertheless some indications of uneasiness on the
22 horizon.

23 From 1957 to 1958, wages and salaries in the
24 industry rose \$1,200,000, but employment showed a
25 decline of 150 employees. 27/

26 The more current indications I referred to are events such
27 as this: Some years ago, a pharmaceutical manufacturer
28 with faith in the economy of Canada invested in a
29 plant on the outskirts of Montreal for the manufacture
30 of penicillin, streptomycin and later cortisone in



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2 addition to other fine chemicals. This provided
3 employment for some 400 Canadians.

4 As a direct result of imports from low cost
5 countries, the company has been forced to close this
6 phase of its operations in 1960, and the principal
7 losers are the employees now out of jobs. I know that
8 this has tempered the expansion intents of other
9 pharmaceutical manufacturers, and this not only leads
10 to unemployment but it has a tendency to roadblock future
11 employment.

12 Nine thousand employees of this industry have
13 an important stake in this country and their cumulative
14 purchasing power means much to the economy of the
15 country and to the communities in which they live.
16 Based on a formula developed by the CNR research
17 department, these 9,000 employees account for a total of
18 19,530 jobs as a result of their bearing on construction,
19 transportation, communications, finance, insurance,
20 utilities and other services. 28/ And that is an
21 impressive figure.

22 To the best of my knowledge, our Association
23 has never in its 46-year history, ever advocated higher
24 tariffs. Nor has it been a member of the so-called
25 protectionist bloc. But it is certainly disturbing to
26 see the increasing purchases by our Federal and
27 provincial governments of drugs imported from other
28 countries, at the expense of tax-supporting Canadian
29 manufacturers and employees. I venture that the savings
30 realized by purchasing imported drugs are not as great



1
2 as the taxes which would have been gained from Canadian
3 companies and their employees supplying this same
4 material.

5 Statements were made last year to the effect
6 that 90 per cent of pharmaceutical preparations used in
7 Canada are imported. The fact is that only about 17
8 per cent of the dollar value of all pharmaceutical
9 preparations supplied in Canada in 1958 were imported.

10 29/ To determine where our Canadian manufacturers stand
11 in this respect, I surveyed a number of companies to find
12 out what percentage of their products are manufactured
13 in Canada. Of 28 replies received, 8 were from wholly-
14 owned Canadian companies, 15 were from Canadian subsid-
15 iaries of U.S. concerns, and 5 were from U.K. and
16 European subsidiaries.

17 The results showed that these 28 firms
18 manufacture in Canada an average of 94 per cent of their
19 products, and import only 6 per cent. Nor was there
20 any significant difference according to financial control.
21 The Canadian-controlled firms manufactured 98 per cent
22 of their products in Canada; the U.S. firms, 92 per
23 cent; and the European firms 94 per cent.

24 Furthermore, in addition to their manufacturing
25 facilities, all of these companies maintain their own
26 packaging operations in Canada and do an average of 96
27 per cent of their packaging on the premises. These
28 companies have a heavy investment in Canada and our
29 economy, regardless of where their financial control is
30 held.



1
2 INDUSTRY PROFITS

3 I now wish to offer evidence that profits in
4 Canada's pharmaceutical manufacturing industry are not
5 exorbitant in comparison with manufacturing in general
6 and, in fact, are lower than those of many other
7 industries.

8 You will recall my mentioning earlier that we
9 retained an accounting firm to process a number of
10 surveys for our Association. One of these surveys was
11 for a breakdown of the sales dollar for the year 1959.
12 The results appear on the following two pages. Compar-
13 isons are shown for the year 1958 and while only 28
14 companies replied to that survey, the percentages for
15 1958 and 1959 are significantly close. For your
16 convenience, I have placed in brackets following our
17 industry's figures, the comparable percentages reported
18 by the Canadian Manufacturers Association for all
19 manufacturing industry in Canada during the same years.
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3. EMPLOYEE BENEFITS (payments to pension plans, group life, sickness or hospitalization insurance, workmen's compensation, unemployment insurance, medical services, cafeterias, welfare funds, 25-year clubs, etc.):	2,210,906	1.7%(1.7)	1.8%(1.6)
4. MATERIALS (including raw materials, finished and semi-finished materials purchased for resale, materials consumed in processing operations, and packaging and shipping materials; but not including plant supplies to be included in 6.):	42,190,377	32.3%(46.2)	32.7%(46.5)
5. EXCISE AND SALES TAXES (included in 1 above, remitted or to be remitted to Dominion and other governments):	7,788,665	6.0%(3.9)	5.1%(3.5)
6. OTHER EXPENSES (including plant supplies, power, water, municipal taxes, maintenance, repairs to buildings, machinery and equipment (not including salaries and wages or employee benefits included in 3 above), office, administrative and selling expenses not included above, including charitable donations and interest expense):	30,597,562	23.4%(13.4)	23.2%(14.2)
7. DEPRECIATION:	2,138,897	1.6%(3.6)	1.5%(4.0)
8. TAXES ON INCOME (Dominion and provincial taxes on income):	7,895,781	6.0%(4.2)	5.5%(3.6)
9. DIVIDENDS (or equivalent - distribution of profits only):	4,125,893	3.2%(2.5)	3.2%(2.6)
10. RETAINED IN THE BUSINESS (that amount of the year's income not paid out in dividends or equivalent):	<u>3,945,966</u>	3.0%(2.6)	3.3%(2.0)
TOTAL	\$130,755,546	100%(100)	100%(100)
11. NUMBER OF EMPLOYEES (average over 12 months period of fiscal year):	6,446		
12. TOTAL NET WORTH (capital stock - preferred, common, etc. - and total retained earnings - surplus and reserves):	\$ 58,639,722		

Canadian Pharmaceutical Manufacturers Association

September 15, 1960

RESULTS OF THE STATISTICAL SURVEY FOR THE YEAR 1959

(As compiled from reports submitted by 43 companies)

NOTE: The dollar values shown are for the year 1959. Percentages in relation to dollar value are shown for both 1959 and 1958, for comparison purposes. The percentage figures in brackets are the results of the Canadian Manufacturers Association survey for all manufacturing industry in Canada, for 1959 and 1958. The CPMA percentages for 1958 are the result of a survey of 28 companies.

	<u>Dollar Value</u>	<u>Percentages</u>	
		<u>1959</u>	<u>1958</u>
1. NET SALES (that is, gross sales, including sales tax where sales are made tax included less returns and allowances) FOR:			
a. HUMAN PHARMACEUTICALS (incl. all vitamins and O-T-C pharmaceuticals):	\$ 96,516,511	73.8%(98.8)	80.5%(99.2)
b. VETERINARY PHARMACEUTICALS:	2,100,597	1.6%	1.4%
c. PROPRIETARY MEDICINES (patent medicines but not O-T-C pharmaceuticals):	3,746,740	2.9%	1.0%
d. CHEMICALS:	9,942,419	7.6%	3.8%
e. OTHER PRODUCTS (not listed above):	16,903,903	12.9%	12.2%
g. OTHER INCOME:	1,545,376	1.2%(1.2)	1.1%(0.8)
TOTAL INCOME:	\$130,755,546	100%(100)	100%(100)
f. NOTE: Participants reported that they manufactured \$973,830 worth for other CPMA member companies.	Total net sales, or total income less other income, was \$129,210,170.		
2. WAGES AND SALARIES (all wages and salaries including management salaries, directors' fees, payments to employees for holidays and in connection with profit sharing or production incentive plans, unless such payments are distributed only upon retirement of employee or some similar basis, in which case they are to be included in 3.):	\$ 29,861,499	22.8%(21.9)	23.7%(22.0)



1
2 It will be noticed that profits after taxes in 1959
3 were 6.2¢ of the sales dollar, as compared to 5.1¢ for
4 all manufacturing industry. Of this amount, about half
5 was retained in the business for future expansion and
6 3.2¢ was paid out to shareholders who financed the
7 business. Compare this 6.2¢ profit with the 12¢ which
8 was paid out in excise, sales and income taxes.

9 Almost one quarter of the total sales dollar,
10 24.5¢ went towards wages, salaries and employee benefits,
11 while materials used in manufacturing accounted for 32.3¢.
12 Other expenses accounted for 23.4¢ and depreciation was
13 1.6¢. Comparing expenses to profits, it cost
14 pharmaceutical manufacturers in 1959, 93.8¢ for every
15 dollar's worth of merchandise sold.

16 This profit figure is coincidentally supported
17 by the Department of National Revenue, which allocates
18 to pharmaceutical manufacturing a profit after taxes of
19 6.5 per cent for the year 1958. Of 10 industries compared
20 for average profit on sales over a six-year period
21 ending 1958, pharmaceutical manufacturing placed fifth
22 with a profit of 6.3 per cent, following alcoholic
23 beverages at 9.7 per cent, tobacco at 8.2 per cent,
24 carbonated beverages at 7.8 per cent, and wire products
25 at 7.2 per cent. 30/

26 While the rate of return for other industries
27 would appear to be turning upward, the pharmaceutical
28 industry rates have levelled off and there are indications
29 that the industry is facing a period of downward pressure
30 on rates of return. 31/ This is certainly the case



1
2 in 1960. A considerable number of companies have been
3 concerned about a falling off of sales in the first
4 three quarters of this year. This could prove detrimental
5 to the industry, unless some extraordinary product
6 development occurs to push the industry into another
7 period of acceleration.

8 Fortunately, this will not necessarily be
9 immediately detrimental to the health picture of Canada,
10 unless a similar levelling off occurs in other major
11 nations, particularly the United States. The rate of
12 profit return determines the amount available for
13 discovery. While a drop in rate will effect the research
14 and development picture in Canada, the fact that many
15 Canadian firms are subsidiaries of U.S. companies will
16 enable them to capitalize on developments within their
17 parent companies, thereby keeping Canada abreast of any
18 new medical discoveries immediately they appear.

19 As the nation grows and the market for
20 pharmaceuticals in Canada expands, domestic pharmaceutical
21 manufacturers will be able to increase their research
22 facilities accordingly and the nation will depend less
23 and less on other countries for the advancements
24 essential to the health of our people. This dependency
25 will gradually disappear, but only if the Canadian
26 pharmaceutical manufacturing industry continues to grow
27 and prosper.

28 Product obsolescence or the high rate of
29 turnover of new products, peculiar to pharmaceutical
30 manufacturing, carries with it a comparatively high



1
2 degree of financial risk. The non-economist might
3 call it a gamble based on the factor of whether a new
4 product is going to earn its keep before it is replaced
5 by a more effective drug. If the product lasts for the
6 required period of time, then the company at least
7 recovers its initial investment. But if a better product
8 is introduced by a competitor before this demarcation
9 point is reached, then the company loses and this loss
10 of financial return can be considerable. If, for some
11 reason, the product is not accepted by the medical
12 profession, the company still loses its investment.

13 This degree of risk determines the profit or
14 return on investment in any competitive industry. If
15 the risk of failure is low, then the profit can be
16 correspondingly low. But if the financial risk is high,
17 and the companies are required to continually bring out
18 new products or lose ground, then the profit return must
19 be sufficient to induce the firms to continue to invest
20 in prospective new products.

21 As Dr. Dixon points out, higher risk is expected
22 to bring higher rewards to compensate for taking the
23 risk. This is the economic element in any growth industry.
24 It is evident, however, that the pharmaceutical manu-
25 facturing industry's rate of return of 6.2 per cent is
26 less than that of many other industries with similar
27 risk patterns.

28 This is further borne out by the high pro-
29 portion of loss companies within the industry, which is
30 another indicator of the risk involved in pharmaceutical



1
2 manufacturing. The percentage of loss companies in the
3 industry over the six-year period ending 1958 was higher
4 than that for all manufacturing industries. In a
5 sampling of 10 selected industries covering the same
6 period, pharmaceutical manufacturing was second only to
7 that of machinery. 32/

8 While a growth industry, the stocks of
9 pharmaceutical companies are not generally considered
10 "growth stocks" in investment circles. Shares of
11 pharmaceutical companies have shown a marked rise over
12 the years, but this has been largely the result of the
13 transition in volume wrought almost overnight by the
14 introduction of the wonder drugs. For instance, the
15 percentage increase in gross selling value of drugs
16 manufactured in Canada from 1929 to 1939 was only 43
17 per cent, while the increase from 1939 to 1949 was 164
18 per cent. 33/ Contrary to prevalent opinion, the
19 yield in respect to risk is not as high as many other
20 stocks on the world market.

21 In commenting on the "craze for growth" in
22 investments, one international journal stated that some
23 of the groups favoured by institutional investors,
24 including electrical equipment, drugs, office machines
25 and chemicals, sell at 15 to 20 times earnings, to yield
26 between two and three per cent. Yet the so-called
27 growth stocks, embracing electronics, "leisure" and
28 sports activities, sell at anywhere from 30 to 100 times
29 current annual earnings, and often provide little or
30 nothing in dividend yield. 34/



1
2 Looking at the industry's average profit from
3 the patient's viewpoint, the 6.2 per cent is based on
4 the manufacturer's sales dollar. The percentage of
5 manufacturer's profit paid by the patient works out to
6 slightly more than 3¢ of the retail sales dollar.
7 Consequently, if the manufacturer's profit were taken
8 away entirely from a product carrying a suggested list
9 price of \$1.00, the patient would still be paying 97¢.
10 This 3¢ is a small price to pay for the free enterprise
11 operation whose competitiveness has been the primary
12 incentive to the introduction of so many new and more
13 effective drugs. It is also one of the reasons why any
14 study of manufacturing efficiency must be limited between
15 the cost of manufacturing and distribution and the
16 selling price at wholesale, not retail.

17 There are a variety of different methods used
18 for considering profits of any industry. These range
19 from profit on investment and profit on net worth to
20 profit before and after taxes. I have selected profit
21 after taxes for this presentation, because this is the
22 yardstick used by our companies to determine the
23 efficiency of their own operations. Furthermore, it is
24 the one used by the Canadian Manufacturers Association
25 in determining the average for all Canadian manufacturing,
26 and this has given us an opportunity to compare
27 pharmaceutical manufacturing in relation to all
28 manufacturing for the year 1959.

29 But regardless of economic theories and
30 applications, the course of medicine in Canada is best



1 served by a variety of companies striving to outdo
2 each other in finding new and more effective drugs.
3 And this can only be done if the companies continue to
4 get a reasonable return for their efforts. Any industry
5 must be profitable if it is to function in the best
6 public interest.
7

8 A considerable amount of publicity has emanated
9 from the United States concerning mark-ups reputed to
10 be in thousands of per cent. This makes good newspaper
11 copy, but the allegation has more holes in it than a
12 meat grinder.

13 The allegation was briefly this: If you pay
14 11.7¢ for raw materials and sell the finished product
15 at \$12, you have made a mark-up of 7,000 per cent!
16 This is equivalent to saying that the wood in this table
17 cost \$2. but the table sold for \$25, which means that
18 the supplier concerned made \$23. profit. I doubt whether
19 the carpenters who made the table would agree to this
20 type of reasoning. Even a grade five student knows
21 better.

22 From the standpoint of our food industry,
23 corn sells for less than a cent and a half a pound,
24 yet a pound box of cornflakes costs us about 44¢. Does
25 this mean that the cornflakes companies make 3,300 per
26 cent? Or metals: Steel at the mill costs about 11¢
27 for 2.2 pounds or 1,000 grams. Yet .00054 of a gram of
28 this steel in the form of a fine hair spring for a
29 watch is worth about \$10.25. Both are steel, yet the
30 percentage increase from raw material to finished



1
2 product is 1,725,590,900 per cent.

3 Probably the outstanding example of this in
4 the drug industry is water used for injection purposes.
5 Now water is about the cheapest raw material known. In
6 fact, water used in one of these injectable containers
7 costs only .000004¢. If the final package sells for 10¢,
8 the difference between the cost and price would be
9 2,500,000 per cent. However, most companies actually
10 lose money on this product at 10¢, because of the work
11 required to make the product. Here we must add to the
12 raw material the cost of purifying the tap water, its
13 packaging, sterilization, injection for sterility,
14 rejection of lots found unsatisfactory in quality control,
15 the wages and salaries of skilled labour, and overhead
16 including light, power, insurance, distribution, shipping
17 and taxes, among others.

18 In processing, even distilled water must be
19 tested for organic and inorganic impurities, and the
20 containers must be tested bacteriologically for sterility
21 before filling. In addition, samples must be taken and
22 injected into rabbits to test for pyrogens. When the
23 ampoules are filled and sealed, they are then immersed into
24 a dye bath to determine whether there are any indiscernible
25 cracks in the ampoules. If there are any such cracks,
26 the dye will colour the solution and it has to be
27 destroyed. This must be done with every ampoule sold,
28 because the material goes into a patient's veins and any
29 imperfection could be dangerous. If the ampoule of water
30 meets all of these requirements, then it is released for



1 issue to the hospital.

2 Raw materials are sometimes the lowest elements
3 in the total cost of making a drug, and any attempt to
4 project the difference between raw materials and selling
5 price as profit, must be recognized for what it is:

6 A fallacious economic argument of the headline hunter.

7 RESEARCH AND DEVELOPMENT

8 When the chairmen of the boards of two major
9 pharmaceutical manufacturing concerns in Canada extended
10 an invitation to the members of this Committee to tour
11 their facilities, this was not merely a co-operative
12 gesture. These two companies have long held the opinion
13 that if every Canadian could see just what goes on in a
14 multi-line pharmaceutical plant, there would be virtually
15 no complaints about the so-called high cost of drugs.
16 A major pharmaceutical plant in this country is more than
17 bricks, mortar and storage rooms. It is a complex
18 composition of laboratory and production equipment, manned
19 by skilled, technical and scientific personnel of the
20 highest order. The reason for this, of course, is that
21 pharmaceutical manufacturing is a science, both pure and
22 applied.

23 A study by General Electric Laboratories in the
24 United States revealed that the ratio of scientists to
25 general employees in the drug industry is three and a
26 half times higher than in such major research fields, as
27 the chemical, petroleum or electrical industries. 35/
28 While comparable figures are not available for Canada,
29 we can assume that the ratio is equally high in this
30



1 country..

2
3 The per capita expenditure on all types of
4 research in 1955, was \$26. for the United States, \$22.
5 for the United Kingdom and \$12. for Canada. 36/ This
6 indicates that Canada has a long way to go in the field
7 of research before it can catch up to the U.S. and U.K.
8 on a per capita basis. But there is no doubt whatever
9 that we shall get there. It is merely a matter of time.

10 In the field of drugs, the U.S. pharmaceutical
11 manufacturing industry spent \$170,000,000 on research
12 and development in 1958. 37/ In 1959 this figure
13 reached \$197,000,000 in the biggest privately financed
14 assault on ill health in history. 38/ It has been
15 estimated that by 1970, the total support of medical
16 research by private industry and government in the United
17 States alone may well require annual expenditures of
18 \$3 billion. 39/

19 The fact that many of our Canadian drug companies
20 are subsidiaries of U.S. firms, and a number of our wholly-
21 owned Canadian companies have research connections in the
22 U.S., means that Canada will obtain immediately any new
23 discovery or development which may arise from these
24 substantial expenditures. In respect to a new drug, the
25 speed of availability is the most important social and
26 medical factor. Without these research connections, it
27 would take time for us to learn the compositions and
28 processes involved, and during this time a considerable
29 number of Canadians would inevitably die.

30 As a nation, it is our responsibility to future

The first part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself. The second part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself. The third part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself. The fourth part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself. The fifth part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself. The sixth part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself. The seventh part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself. The eighth part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself. The ninth part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself. The tenth part of the paper discusses the importance of the study of the history of the English language. It is argued that a knowledge of the history of the language is essential for a full understanding of the language itself.



1 generations of Canadians yet to come, to maintain a sound
2 and efficient domestic drug manufacturing industry.

3 Canada is still too small to consider competing with the
4 United States in the field of drug discovery. But we
5 are growing, and at a faster pace than the United States,
6 as evinced by the percentage change in population from
7 1953 to 1958, which was 14.8 per cent for Canada and 9.0
8 per cent for the U.S. 40/

9
10 As our population rises, and the sale of drugs
11 increases, our Canadian companies will be able to spend
12 more and more of their resources on research and
13 development. But until that time arrives, we must use
14 our own Canadian brand of intelligence and ingenuity,
15 to ensure that our people continue to have the finest
16 medication available.

17 Prior to this hearing, figures on drug research
18 and development in Canada were not available. In order
19 to get all of the facts possible for this representation,
20 we undertook through our accountants a survey of the
21 work being done in this area by some of our companies.
22 Time did not permit a comprehensive and detailed analysis
23 of all companies. However, we were able to get answers
24 to specific questions from about 30 firms, eight of which
25 could not be used because of incomplete answers or an
26 imbalance of return. This left us with 22 companies,
27 and the results are most interesting.

28 Of these 22 firms, 21 are actively conducting
29 clinical research studies in this country, while 11 are
30 engaged in some form of pure and applied research and



development in Canada. I might add that these firms include wholly-owned Canadian firms, plus subsidiaries of U.S., U.K. and European companies.

These 22 companies incurred a total cost for all drug and medical research and development in Canada during 1959 of \$5,324,613, or 6.3 per cent of their gross sales. This was an increase of 13 per cent over 1958, when they spent \$4,718,770, or 6.1 per cent of gross sales. As might be expected, the percentages varied from company to company, as is shown by the following analysis for 1959:

<u>R. & D. as % of Sales</u>	<u>No. of Firms</u>
Under 5%	7
From 5% to 6%	5
From 6.5% to 8.9%	6
From 9.7% to 15.1%	4

About half of this expenditure for both 1959 and 1958 was actually incurred in Canada, while an equal amount was spent by foreign corporations on behalf of Canadian subsidiaries, as is shown by the following.

- a. Total amount actually spent in Canada.
- | | |
|--------------------|--------------------|
| 1959 - \$2,500,165 | 1958 - \$2,238,185 |
|--------------------|--------------------|
- b. Total amount spent by foreign control on behalf of Canadian subsidiaries:
- | | |
|--------------------|--------------------|
| 1959 - \$2,614,900 | 1958 - \$2,288,757 |
|--------------------|--------------------|

In addition, some Canadian firms underwrote special research projects abroad. This totalled \$209,548 in 1959, as compared to \$191,828 in 1958.



1
2 Of the total amount expended in Canada on research and
3 development, 14 per cent or \$347,697 was spent outside of
4 the companies in 1959, as against \$297,298 in 1958.

5 Significantly, over the five-year period ending
6 1959, these 22 Canadian companies were responsible for
7 a total of \$20,835,549 in research and development
8 expenditures. For a country of our size, this is cer-
9 tainly a substantial amount of money, and by no means
10 includes that expended on behalf of all pharmaceutical
11 manufacturers.

12 As you know, clinical investigation refers to
13 the testing of drugs on humans after the comparative
14 safety and toxicity have been determined on animals in
15 the laboratory. The amount spent by these companies on
16 clinical trials reached \$362,889 in 1959, an increase of
17 20 per cent over the 1958 figure of \$302,288.

18 In addition to the amounts which might be
19 considered internal expenditures, the companies also
20 gave research grants to universities, hospitals, individual
21 researchers and health research foundations, etc. These
22 amounted to \$327,784 in 1959, or 13 per cent above
23 1958's \$298,358. Grants to universities, however,
24 increased by 27 per cent, while grants to hospitals rose
25 12 per cent over the period. The total for research
26 and development grants over the five-year period ending
27 1959 was \$1,142,276.

28 These figures do not include the amount spent
29 by foundations connected with and entirely supported by
30 pharmaceutical manufacturers. Two companies reported



that such foundations had contributed in grants \$50,500 in 1959, \$63,200 in 1958, and \$285,200 for the five-year period ending 1959,

The total capital expenditure on research and development laboratories and equipment located within Canadian plants was reported by 11 companies at \$2,456,332 for 1959, as against \$1,266,582 for 1958. All of the 11 firms reporting showed substantial increases over the year, and it will be noticed that this average increase was 94 per cent. This does not include the wages and salaries paid to the following scientific personnel who were employed in research and development work by the 22 firms:

<u>Type of Researcher</u>	<u>1959</u>	<u>1958</u>
Ph.D., D.Sc., or M.D.	76	74
M.Sc. or equivalent	18	18
B.Sc., B.Ph.m. or equivalent	60	54
Laboratory assistants, etc.	<u>107</u>	<u>100</u>
Total	261	246

There is no doubt whatever that the amount of money expended by and on behalf of Canadian pharmaceutical manufacturers is small in relation to that of our southern neighbour. But we are increasing at a fast pace, as shown by the transition from 1958 to 1959:

Total Drug research expenditures within Canada increased 12 per cent;
Clinical research increased 20 per cent;
Research grants to universities increased 27 per cent;



1
2 Research grants to hospitals increased 12 per
3 cent;

4 Investment in Canadian-based research labor-
5 atories and equipment increased 94 per cent;
6 Employment of scientific personnel increased
7 6 per cent;

8 And the percentage of the gross sales dollar
9 allocated to research and development increased
10 from 6.1 per cent to 6.3 per cent.

11 We in Canada have a truly great future ahead
12 of us medically, scientifically and economically. We
13 have been losing many of scientifically-trained personnel
14 to other nations, but the incentives at home are
15 commencing to improve. If we do not maintain this
16 conducive climate in relation to our growth, we will in
17 essence become a second-class research nation even though
18 we may be large in population. If this happens, we will
19 have no hope whatever of building a scientific nation,
20 for scientists will not remain in a country which does
21 not offer scope for jobs and advancement, and government
22 cannot do this by itself.

23 This might sound idealistic, but I can assure
24 you that it is sincere. I represent a young industry
25 which is making a marked contribution to the health,
26 economy and scientific well-being of a potentially
27 great nation. And I ask you not for political or
28 economic favours, but merely for an honest understanding
29 of what our companies have and are accomplishing for
30 the good of Canada.



1
2 QUALITY CONTROL

3 Several eminent men have, in their presentations
4 before this Committee, commented on the subject of
5 quality control in the production of drugs. I wish to
6 present to you the viewpoint of the manufacturers in
7 this respect, and by that I mean the companies with
8 operating plants in this country.

9 In Canada today, the reputation of the manu-
10 facturer is still the best test of reliability, in the
11 field of drugs as in other lines of endeavour. This is
12 recognized by most physicians and pharmacists, for the
13 following reasons:

14 It is vitally important that these pharma-
15 ceuticals do the specific task required, with an absolute
16 minimum of side effect. In this respect, there can be no
17 margin of error, for either the physician, the pharmacist
18 - or the patient. Few other products in the broad field
19 of manufacturing meet the exacting requirements which
20 are the very foundation of the ethical drug.

21 Nor is this an exaggeration. If a patient
22 is suffering from a serious illness which can be cured
23 by a specific drug, then it is absolutely essential
24 that the drug be correct in every respect. In certain
25 cases of emergency, time is imperative, and if the drug
26 fails to do the job expected of it the consequences can
27 be extremely serious.

28 We have heard evidence before this Committee
29 that some drugs used in our hospitals have not been up
30 to standard and that complaints have been received



1 regarding this matter. 41/ On the surface, it is
2 laudable that this has been discovered and that steps
3 are being taken for the future testing of all medication.
4 But we must remember that this is not a food which may
5 have turned rancid, or a surgical instrument which has
6 broken in transit. We are dealing with scientific
7 preparations which in their most effective sense can
8 mean a matter of life or death, and in their limited
9 sense a difference between a short or long stay in the
10 hospital.
11

12 Aside from colour or size, the only way a
13 doctor has of knowing whether a drug fails to meet its
14 requirements, is after it has been given to the patient.
15 So we find a substandard drug, but what about the patient
16 in the meantime? The hospitals or the retail pharmacies
17 are not the places to test the effectiveness and
18 composition of drugs, regardless of the price. In the
19 laboratories, our pharmaceutical manufacturers would not
20 even take this chance with their experimental animals.

21 The proper place to test and ensure the quality
22 of a drug is at its source of manufacture, during the
23 time it is being made. When it arrives in the hands of
24 the doctor or patient, there should be no question
25 whatever about the quality of the drug.

26 This responsibility hangs heavily on the
27 shoulders of the Canadian pharmaceutical manufacturer
28 for the certainty of his control devices is the only
29 real protection available to the doctor and the druggist.
30 The physician and pharmacist do not have the complicated



1
2 equipment necessary to test the stability and effective-
3 ness of modern medicaments.

4 Statements have been made to the effect that
5 the Food and Drug Directorate checks and certifies all
6 drugs offered for sale. This is incorrect, as was ver-
7 ified on the floor of the House of Commons by the
8 Federal Minister of Health, the Hon. J. Waldo Monteith.

9 42/ We have in Canada a Food and Drug Directorate which
10 is the finest enforcing agency of its kind in the world,
11 and which employs some of the most outstanding civil
12 servants to be found in the field of health anywhere.
13 But it would be virtually impossible for the Government
14 to check and certify every batch of drugs before it is
15 sold. This would require literally thousands of
16 inspectors, technicians and scientists, and it is just
17 not practical.

18 As a factual example of the effort which would
19 be required, 23 Canadian manufacturers which I surveyed,
20 produced 24,989 separate batches of drugs in 1959 and
21 an equal amount in 1958. Based on this figure, I
22 estimate that there are an absolute minimum of 76,000
23 separate batches of drugs placed on the market by major
24 companies in Canada each year. The sizes of the batches
25 naturally vary according to the drug, and this figure
26 does not include the countless small regional companies
27 which, although their batches are much smaller in size,
28 produced nevertheless a considerable number during the
29 course of the year.

30 Your provincial government purchasing agents



1
2 know that an order for 10,000 ampoules, for example,
3 might comprise anywhere from 5 to 10 separate batches.
4 And in quality control, you cannot merely take a sample
5 from the 10,000 to determine purity and potency. You
6 must check a sample from every batch, and it takes a
7 considerable amount of time and money to test these
8 samples.

9 If the Federal Government were required to test
10 every batch before release to the hospitals and pharmacies,
11 then it would be required to test a minimum of 76,000
12 batches per year, and this does not include the
13 proprietary medicines or regional operators. Granted, it
14 could be done, but only at a fantastic cost to the
15 Canadian taxpayer.

16 Statistics show that it cost the 23 companies
17 mentioned earlier about \$1,716,000 for their quality
18 control testing operations in 1959. Projecting this on
19 the basis of 76,000 and more batches, it would cost the
20 Food and Drug Directorate an additional minimum of
21 \$5,370,000 annually on top of its present budget, and
22 this does not include the millions of dollars which would
23 be required for the laboratories and equipment with
24 which to test the drugs.

25 As was mentioned before this Committee earlier,
26 the Attorney General's Laboratory has embarked on the
27 testing of ataractic drugs on behalf of Ontario hospitals,
28 and intends to cover other drugs in the future. This
29 apparently is being done as a protection to the hospitals
30 in light of poor experiences with generic-name drugs,



1 as was specifically mentioned at the time. 43/

2 I urge you and the officials of the Department
3 of Health to carefully study the potential costs of
4 such an operation. Our companies have had considerable
5 experience in this matter and certainly have effected
6 all economies possible within their own operations. Yet
7 the cost of quality control testing to the 23 companies
8 concerned rose 7.4 per cent from 1958 to 1959.

9 I might add that our companies are not the
10 least bit concerned about government testing of the
11 products they produce, as long it does not cost the
12 companies more money. They know their products will
13 meet the required standards. But the economy of testing
14 generic name drugs appears false, even though the need
15 certainly exists.

16 Look at it from this standpoint: If savings
17 can be realized by purchasing generic name products,
18 then an incentive exists. But if you have to spend
19 public money to test these products, then the cost of
20 testing should certainly be added to the cost of the
21 drugs.

22 From the economic viewpoint, the cost and onus
23 of responsibility for the quality of the medication
24 should be placed on the supplier's shoulders and not on
25 the government's budget. From the health viewpoint,
26 no drug should be purchased for supply to any Canadian
27 unless that drug is known to have come from a reliable
28 company with its own quality control facilities.

29 To give you a better appreciation of the
30



1
2 meaning of quality control, I wish to read a few excerpts
3 from a paper presented by one of Canada's outstanding
4 authorities on laboratory work in respect to quality
5 control:

6 "Every ethical pharmaceutical manufacturer
7 worthy of his name, maintains a quality control labor-
8 atory to ensure that every product of his manufacture
9 conforms to his label claim before it is released for
10 sale. The present day quality control laboratory is
11 equipped to carry out a wide range of biological, micro-
12 biological, chemical and physical testing procedures.
13 These include potency, pyrogen and toxicity tests in the
14 biological field; sterility of injectables, and potency
15 of antibiotics and vitamins using microbiological
16 techniques; and a wide range of potency, identity and
17 purity assays in the fields of chemistry and physics.

18 "In the past few years, many ingenious and
19 elaborate instruments have been developed to give
20 sensitivity to the analyst's hand and keenness to his
21 vision. Spectrophotometers have been developed for light
22 measurement in the visible, the ultraviolet and the
23 infrared regions of the spectrum. All of these are
24 indispensable in today's control work. Extremely
25 sensitive balances are available to weigh the microgram
26 quantities encountered in the dosage forms of some of our
27 very potent drugs. Electronic devices are now in use to
28 measure and record the temperatures of the rabbits used
29 in the pyrogen test on injectables. There are many others.

30 "Many new techniques of analysis have been



1 introduced, too. Radioactive isotopes help in the assay
2 of a number of drugs. Radioactive cobalt, for example,
3 can be used to determine vitamin B₁₂. Column chromato-
4 graphy, paper chromatography, and more recently, gas
5 chromatography, are very sensitive tools in the isolation
6 and assay of many drugs, both new and old. The use of
7 spectrophotometry in assay work is steadily expanding.

8 "The work of the quality control laboratory,
9 on both new drugs and old, is time-consuming and costly.
10 Much of it may seem at times to be redundant. It is
11 extremely rare that an injection is found to be non-
12 sterile or pyrogenic or that an active ingredient has
13 been omitted, or added in excessive quantity. Neverthe-
14 less, no ethical manufacturer is willing to run the
15 minute risk that such a thing may happen. Hence, even
16 though the cost of the control work may represent 10 to
17 15 per cent of the production cost, every lot is checked
18 for potency, sterility, safety and all the other
19 attributes that are appropriate.

20 "Most of the work of the quality control
21 laboratory goes unobserved by the physician. Like the
22 air we breathe, quality control is only apparent when
23 it is lacking." 44/

24 A manufacturer could cut corners, use a
25 minimum amount of quality control, and save a consider-
26 able sum of money. Chances are that he would get away
27 with it, for there is no law in Canada requiring the
28 manufacturer to use extreme diligence in quality control
29 procedures. By cutting corners, he could sell his
30



1 products for less, and so attempt to take business away
2 from his competitors. But the risk would be too great
3 for any reputable manufacturer.

4 To the patient, a tablet is a tablet. He does
5 not know enough about drugs to tell the difference
6 between an estrogenic tablet or a similar one made from
7 plaster of paris. With the colour controlled, both
8 would look alike. As a result, the patient must place
9 his trust in the doctor, and the doctor who knows the
10 contents and effectiveness of the tablets but does not
11 have the facilities with which to test them must, in
12 turn, place his trust in the manufacturer's integrity.

13 The reputable manufacturer who places his
14 brand name on his product must maintain that doctor's
15 confidence, or the doctor will never again prescribe
16 one of his products. On the other hand, the manufactur-
17 er could cut corners, sell at a lower price, take
18 chances, and not put his brand name on the tablets.
19 Here, he would be placing price above quality and, if
20 his conscience was not too strong, he might even be
21 able to get a good night's sleep while selling drugs he
22 himself had no confidence in.

23 As the editor of one medical journal stated:
24 "Control is the secret of sound manufacture. A
25 manufacturer who ignores controls can sell his product
26 cheaper. It may be announced as a 'pharmaceutical
27 equivalent' (a generic-name product purported to be the
28 same as the brand-name product), but it isn't. It isn't
29 equivalent in potency, solubility, viscosity and so on,
30



1
2 even though it looks like an equivalent in color or
3 fluid or shape of tablet.

4 "Fluids separate, tablets decompose, ointments
5 can deteriorate and any medication can become contamin-
6 ated. A suppository that melts in the container before
7 use, or fails to melt in the body cavity during use, is
8 worthless no matter how cheaply it can be bought ...

9 A first-class manufacturer, however, will not put out a
10 suppository without a controlled melting point. A third-
11 rate maker may do so. And he can sell it cheaper." 45/

12 In an article which appeared in the Canadian
13 Medical Association Journal, Dr. J. A. Campbell of Ottawa
14 discussed factors affecting the potency of vitamin
15 products and pointed out the differences based on the
16 manufacturer's use of proper control facilities and on
17 knowledge of the properties of vitamins. Basis for the
18 paper was a study undertaken by the Department of National
19 Health and Welfare, Ottawa. "The data accumulated",
20 stated Dr. Campbell, "have indicated very clearly that
21 in prescribing of vitamin products, serious thought
22 should be given to the reliability of the manufacturer."

23 In order to accomplish this survey, a Food and
24 Drug inspector was sent to each company to purchase
25 samples of all vitamin products. These samples were then
26 analyzed for all vitamins claimed on the label. Resulting
27 comparisons showed the "the differences in the number
28 of products meeting label claim of those companies with
29 control and those without control are striking. Two out
30 of 128 or 1.5% of the controlled products tested were



1
2 deficient while 166 out of 313 or over 50% of non-
3 controlled products did not meet the labelled requirements
4 in one or more vitamins." 46/

5 From the standpoint of Canada's pharmaceutical
6 manufacturers, our companies are concerned about the
7 publicity being given to the so-called low cost of
8 imported medication. But we are not concerned for
9 competitive reasons, because we know that in the final
10 analysis most Canadians will insist on the finest
11 medication available. We are concerned, however, about
12 the fact that drugs which are not quality-control tested
13 in this country can be sold to those who have no means
14 of testing at their disposal.

15 At the present time, the onus of responsibility
16 for the certainty of its drugs rests on the shoulders of
17 the Canadian manufacturer, and I firmly believe that
18 this responsibility should also apply to those who are
19 selling imported drugs in Canada.

20 When you buy from a reliable manufacturer,
21 his reputation ensures that drugs have been properly
22 made and tested. When you buy from others, you have no
23 such assurance.

24 This is borne out by a recent case in the
25 United States, where the police in New Jersey uncovered
26 what is believed to be one of the largest sources for
27 counterfeit drugs in the country. The investigation
28 was authorized by the attorney-general of New Jersey.
29 This company was actively engaged in counterfeiting
30 drugs of reputable manufacturers, and selling these



1
2 drugs either under the name of another company or as
3 generic-name equivalents. Not only was much of this
4 material subsequently found to be substandard, but here
5 is an account of the premises from an on-the-spot witness
6 who knew what to look for:

7 "Words alone cannot describe the dirty and
8 squalid conditions under which these products were being
9 made and stored. Every indication pointed to the fact
10 that the premises were rat infested. The general
11 appearance was that of a dirty machine shop, with debris
12 and refuse which had been permitted to accumulate on the
13 floor of the manufacturing area.

14 "Drug containers were left open and evidence
15 of moisture and contamination was apparent. In the
16 manufacturing area, a row of five or six tabletting
17 machines was surrounded by spilled drugs and crushed
18 tablets. Coating bins were placed in a room adjacent to
19 the washroom and lavatory which was not completely
20 enclosed. No control could have been possible." I was
21 advised that invoices were found on the premises which
22 indicated sales to Canadian importers.

23 I have had calls at the office from people who
24 have stated that they were going to start importing drugs
25 into Canada, and wanted to know how they should go about
26 it. Some even asked me for background information on
27 drugs! Few had ever heard about quality control or even
28 knew what went into a headache tablet let alone an
29 antibiotic or ataractic. But they did know that there
30 appears to be a good market in Canada for someone who



1 is prepared to sell drugs by price alone.

2
3 When we are dealing in human lives, as in this
4 case, then we should insist that these suppliers show
5 evidence that their products have been tested for quality
6 and standards by a reputable and reliable laboratory,
7 preferably located in this country. It would be in the
8 best public interest to do so. We can be as magnanimous
9 as we want in helping other countries economically, but
10 regarding health at home we should start spending more
11 time in thinking about what is best for Canadians.

12 Some 70 years ago, John Ruskin said this:
13 "The common law of business balance prohibits paying a
14 little and getting a lot. It can't be done. If you
15 deal with the lowest bidder, it is well to add something
16 for the risk you run. And if you do that, you will have
17 enough to pay for something better." So it is today.

18 DISTRIBUTION

19 The triumvirate in pharmaceutical manufacturing
20 comprises research, quality control and distribution.
21 A drug that is not available when it is needed might
22 just as well not exist. A hospital can wait for a new
23 supply of linen, if the supplier's stock is low. But
24 an accident victim cannot wait for plasma, nor can a
25 patient with Addison's disease wait for cortisone merely
26 because the hospital pharmacy and the manufacturer are
27 both out of stock.

28 As a result of this need, Canada's pharma-
29 ceutical manufacturing industry has developed one of
30 the most effective and efficient distribution systems



1
2 in the country. It ensures that the right drug is in
3 the right place at the right time. When a new drug is
4 discovered, it must be available to every doctor,
5 pharmacist and hospital in the country immediately,
6 regardless of location. A time lag of even hours can
7 mean life or health to countless patients.

8 Most pharmaceutical manufacturers maintain
9 24-hour-a-day service to fill emergency orders as they
10 arrive, and it is not unusual for a shipment of drugs
11 to be on its way within a half hour after receipt of the
12 order.

13 One firm has a service called mediphone,
14 whereby a doctor can call the company direct for emergency
15 assistance, to discuss a specific reaction of one of
16 the company's products on an urgent case, or even talk
17 over some medical problem with the firm's research or
18 medical director. Other firms maintain stocks in the
19 major centres for immediate distribution to the
20 surrounding areas. The rapid distribution system in
21 pharmaceutical manufacturing is as modern and effective
22 as the products the companies produce.

23 This introduces a little known facet of
24 pharmaceutical manufacturing. I covered earlier the
25 economic factors involved in the mass-produced drugs.
26 But there are also a considerable number of rarely-used
27 medicines for which there is seldom a demand. These are
28 what is known as "service products", and in many cases
29 the amounts used are so small that the companies lose
30 money on them. Some firms even give them away. But



1
2 because they are essential in combatting rare diseases
3 or illnesses, the companies make them available to the
4 medical profession on the premise that any effort is
5 worth a life saved.

6 Here is an outstanding example: A five-year-
7 old Saskatchewan boy was bitten by a Prairie rattlesnake,
8 and rushed to the hospital at Kindersley. Despite
9 emergency services, the boy's condition worsened. Nothing
10 would counteract the venom.

11 There was only one source of a serum effective
12 against rattlesnake venom, and that was located in
13 Eastern Canada. If the boy's life was to be saved, the
14 venom had to be administered that day. The company was
15 called at 1:00 o'clock in the morning and within 18
16 minutes the manager of the company's Winnipeg depot was
17 on his way to the airport, with head office instructions
18 to charter a special plane if necessary to get the serum
19 to Saskatoon. Fortunately, a scheduled TCA flight was
20 ready for departure. The nature of the emergency was
21 explained and the serum was on its way.

22 The director of pharmaceutical services of the
23 University Hospital, Saskatoon, met the plane and took
24 the serum direct to Kindersley. The serum was
25 administered in time and the boy lived. As a matter of
26 interest in light of current criticisms about drug costs,
27 I asked the company concerned what its normal profit
28 was on the three vials of serum involved. It was \$1.80.

29 You may recall the press stories back in
30 April, about the R.C.M.P. constable in B.C. who



1
2 contracted cryptococcus neoformans, a rare fungus disease
3 which affects the brain and spinal cord. During the
4 night, hospital physicians placed an emergency call to a
5 Montreal manufacturer, which had the needed drug. Plant
6 personnel were contacted, called into work, and the
7 shipment was prepared that night. A company represen-
8 tative caught a jet flight to Vancouver, and the
9 constable received his first injection at 11 a.m. Pacific
10 time. In the meantime, the company had arranged for
11 additional shipments of the drug to the hospital for
12 continuing treatment. Unfortunately, the outcome of
13 this case was not as happy as the preceding one.

14 An ion-exchange resin is used to remove high
15 concentrations of potassium in extreme emergency cases
16 of kidney failure. This drug has such a limited use,
17 that the manufacturer stocks it, but gives it to
18 physicians free of charge. It was discovered during a
19 research project which took seven years, cost \$500,000,
20 and was a failure except for this one substance. In
21 commenting on these types of drugs, the magazine New
22 Medical Materia, stated: "While there's little or no
23 financial return from products for which there are few
24 customers, the fact remains that the pharmaceutical
25 industry produces many such specialties - as a service
26 to physicians and their patients. The industry does
27 this on the principle that, no matter how small the need
28 for a drug when measured in number of potential users,
29 the need is tremendous to the individual who must have
30 the drug to avoid death or alleviate suffering."



1
2 Another service to hospitals and retail
3 pharmacy in the distribution picture is the returned
4 goods policy of manufacturers. The brand-name manu-
5 facturer which stands behind its products will take back
6 for credit from drug stores and hospitals, drugs which
7 have passed their expiry period and so lost their
8 effectiveness. In some cases the returns on biological
9 products have amounted to as much as 40 per cent in a
10 single year and, as these returned drugs have to be
11 destroyed, it adds considerably to the costs of the
12 manufacturer.

13 For example, one manufacturer in 1958 listed
14 40 biological products, most of which had expiry dates
15 ranging from six to eighteen months. This same company
16 listed 42 antibiotic preparations, each of which also
17 carried expiry dates. It was estimated that a consider-
18 able part of the 1958 sales volume of this company was
19 represented by drugs having a shelf life of eighteen
20 months or less. A drug that loses its effectiveness is
21 useless to both the patient and the hospital.

22 These are but a few examples among many, which
23 emphasize the importance of a strong domestic pharma-
24 ceutical manufacturing industry, and the fallacy of
25 attempting to put a price tag on everything in the field
26 of medicine. Price has its place, but it should never
27 be made to sacrifice quality and service.

28 THE HIGH COST OF DOING BUSINESS

29 Distribution and some other factors involving
30 business in Canada are higher than in most other nations,



1
2 particularly that of the United States. As this has a
3 bearing on price, I wish to explore the reasons behind
4 the difference in prices of pharmaceuticals in the two
5 countries.

6 However, it is significant that the spread
7 between prices in the two countries is not as great as
8 some people believe it to be. In many instances, drug
9 prices in Canada are lower than those in the U.S. One
10 company, for example, made a study of 118 of its products
11 which were also handled by its U.S. company and found
12 that prices of 74 products were higher in the U.S.
13 than in Canada, while prices of 44 products were higher
14 in Canada than in the U.S.

15 This company further found that of the 74
16 products which were higher in the U.S. than in Canada,
17 the U.S. prices were 32.6 per cent above the Canadian
18 prices. Of the 44 products where the Canadian prices
19 were higher than those in the U.S., prices were 16.3
20 per cent below the Canadian suggested list price.

21 Another company studied a comparison of its
22 products based on average price and sales volume, and
23 found that its products were 12.2 per cent higher in
24 Canada than in the United States. The Canadian 11 per
25 cent Federal sales tax on drugs, which does not apply in
26 the United States, accounts for a good part of this
27 difference. It was obvious that a study conducted at
28 the level of manufacturers' suggested list prices, would
29 indicate that the difference in average price between
30 the two countries is not out of line, particularly in



1
2 relation to comparative prices for many durable goods
3 and other lines of merchandise.

4 Accordingly, along with one of the surveys
5 handled through our accounting firm, I asked a number
6 of our companies which are subsidiaries of U.S. firms to
7 compare from the list prices of the Canadian and U.S.
8 companies, the products which are sold in both countries
9 and to work out the percentage differences.

10 Fourteen companies replied and the results
11 appear on the following page. It will be noticed that
12 there is a considerable variance in the replies, and
13 there are few if any similarities between the various
14 firms. However, the products which had a price higher
15 in Canada than in the U.S., showed a differential which
16 is not out of line when you consider that there is an
17 11 per cent sales tax in Canada and not in the U.S.
18 This should also be borne in mind, when you consider
19 that all firms had products which cost considerably more
20 in the U.S. than in Canada.

21
22
23
24
25
26
27
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29
30



DIFFERENCES BETWEEN DRUG COSTS IN CANADA AND THE U.S.

Total Products

<u>Compared by</u>	<u>No. higher</u>	<u>by %</u>	<u>No. higher</u>	<u>by %</u>
<u>Each Company</u>	<u>in Canada</u>		<u>in U.S.</u>	
40	20	7%	8	10%
26	17	20%	5	10%
28	16	16.6%	12	4.4%
120	75	16.8%	42	18%
18	12	12%	3	11%
57	50	11.5%	7	15.2%
176	162	11.7%	14	32.3%
90	77	16.8%	13	21%
32	26	11%	(not 6 incl.)	"Varies" i
213	0	0	1	40%
124	112	19%	10	17%
26	19	16.5%	5	22.5%
1245	109	11%	12	15%
<u>118</u>	<u>44</u>	<u>16.3%</u>	<u>74</u>	<u>32.6%</u>
AVERAGES: 86	53	13%	16	19%

Percentage differences between list prices of
Canadian and U.S. companies based on products
sold in both countries.



1
2 From the standpoint of averages, the chart
3 indicates that these 14 companies each compared an
4 average of 86 products. Of this figure, 53 were higher
5 in Canada by 13 per cent, while 16 were higher in the
6 U.S. by 19 per cent. And the 13 per cent figure includes
7 Canada's 11 per cent sales tax. Based on our respective
8 economies, it would be stretching the imagination too
9 far to say that there is any significant difference
10 between the prices in Canada and those in the U.S., in
11 view of the market variables which exist between the
12 two countries.

13 If anything, the price of pharmaceuticals
14 in Canada should be considerably higher than in the U.S.,
15 because it costs our companies more to do business here,
16 for the following six reasons:

17 1. Canadian drugs carry a Federal sales tax
18 of 11 per cent; U.S. drugs do not.

19 2. Most manufacturing equipment must be
20 imported from the U.S., and other nations, at a cost of
21 anywhere from $7\frac{1}{2}$ to 20 per cent more than that paid by
22 the U.S. manufacturer for the same equipment.

23 3. The Canadian market is considerably
24 smaller than that in the U.S. and therefore less
25 adaptable to savings through large mass production
26 operations.

27 4. Per unit costs are higher in Canada than
28 in the United States.

29 5. Because of the widely dispersed Canadian
30 market, the Canadian manufacturer must pay more in



1 transportation and distribution costs than his U.S.
2 counterpart.

3 6. About 17 per cent of all pharmaceutical
4 and medicinal products sold in Canada are imported,
5 thereby cutting down still further on the size of the
6 domestic market for Canadian manufacturers.

7 I will not enlarge on these six points, for
8 they are well recognized in this country. However, for
9 the members of the Committee who may wish to study this
10 further, I have prepared a detailed explanation of
11 these factors and this is included in Appendix C.

12 PHARMACEUTICAL INFORMATION

13 An important part of the distribution picture
14 and one which deserves a chapter unto itself, is the
15 educational methods used by pharmaceutical manufacturers
16 in advising the medical profession about new products.
17 An efficient information system is as vital to the health
18 of the nation, as are the discovery of a new drug and its
19 immediate availability from coast to coast. Even the
20 most effective medication available in every pharmacy,
21 would be worthless if the doctors did not know of the
22 drug's use, efficacy, potency and also its contrain-
23 dications.

24 When the first oral diabetic compound, for
25 example, was being studied clinically on this continent,
26 "the intellectual climate of American clinicians
27 (investigators) specializing in diabetics ranged from
28 one of frank skepticism to one of almost hostile
29 resistance toward an oral treatment for diabetes. This
30



1
2 attitude was understandable, stemming as it did from
3 past bitter experience." 47/ This skepticism was
4 also prevalent among other specialists in this field,
5 and the general practitioners.

6 When this compound finally proved effective
7 in clinical study, it was essential that it be made known
8 to the medical profession immediately and with sufficient
9 facts to enable doctors to judge for themselves the value
10 of this new medication. Without an efficient information
11 system, this drug would have stagnated for years on the
12 pharmacists' shelves. And this was just one of the
13 2,787 new single and compound products, hitherto unknown,
14 which were made available to the medical profession
15 from 1950 to 1959.

16 A doctor is an extremely busy man and he does
17 not have the time to study the countless research papers
18 involved in this number of products. Even if he did
19 have the time, a system of information through research
20 papers alone would be impractical and inefficient. The
21 time-lag involved in publishing these papers in medical
22 and scientific journals is considerable.

23 For this reason, the pharmaceutical companies
24 use three principal means of informing the doctor about
25 new products, and improvements in old ones. These
26 include professional service representatives or detail-
27 men, medical journal advertising and direct mail. Of
28 the three, surveys indicate that the detailman is the
29 physician's first and most important source for new
30 product information. 48/ In most cases, he is the only



1
2 personal contact between the doctor and the drug company,
3 and it is the detailman's job to acquaint the doctor
4 with the capacities and limitations of his company's
5 products.

6 For instance, the doctor may read of a
7 particular drug in a medical journal or direct mail
8 piece. To get more information, he can either write to
9 the company or talk to the detailman. From the physician's
10 viewpoint, the visit from the detailman is preferable
11 for in this way he can get answers to his own specific
12 questions or problems in a matter of minutes.

13 Detailmen are not salesmen in the sense the
14 word is used in other industries. Their primary role
15 is that of a source of up-to-the-minute information.
16 Most have university degrees in pharmacy or the allied
17 sciences. A survey of our member companies revealed
18 that the majority of pharmaceutical manufacturers insist
19 that their trainees have a science degree, preferably in
20 pharmacy. In addition to their education, detailmen
21 are thoroughly trained by the companies they represent.
22 They must know the use, action, dosage, toxicity and
23 side effects of their company's products.

24 There are 17,900 doctors and 8,392 pharmacists
25 in Canada. 49/ A good detailman can visit only five
26 or six doctors in a day in the built-up areas and
27 considerably less in the rural areas, in addition to
28 maintaining his contacts with retail pharmacists and
29 hospitals.

30 For instance a company with 35 detailmen,



1
2 discovering a new product of importance to all general
3 practitioners and specialists, would require six months
4 of daily calls by its detailmen before that product
5 could be introduced to every doctor in Canada. Obviously,
6 this means that other method of information must be
7 used to overcome the time-lag.

8 Advertisements in medical journals is another
9 important source of information for the doctor, and
10 those of you who have seen a medical journal will know
11 that these advertisements are ultra-conservative in
12 comparison to the advertising used in consumer media,
13 or trade publications of the durable goods industries.
14 I cannot speak for other countries, but I do know that
15 medical journals in Canada carefully screen their
16 advertisements. It is common practice for all major
17 companies to have their copy reviewed by physicians
18 before it is sent to the journals. Some of the copy
19 is written by doctors.

20 There are several other methods of advertising
21 used by the industry to disseminate information on drugs.
22 These include advertisements in pharmaceutical journals
23 to keep the retail pharmacist advised of advancements
24 in the fields of medication. Exhibits by pharmaceutical
25 companies at medical conventions help to keep the
26 physician informed and, at the same time, assist in
27 underwriting the cost of the meetings. Closed circuit
28 television broadcasts, medical films, distribution of
29 technical papers, direct sponsorship of medical seminars
30 and scientific meetings, are other contributions to



1
2 medicine underwritten by our companies.

3 The amount of direct mail going to the doctor
4 has come up for criticism recently. As I will show you
5 later, the cost of this is negligible in relation to
6 the retail price of drugs. However, many of our companies
7 are concerned about this particular criticism, and are
8 attempting to find answers to individual problems at
9 the company level.

10 A survey of 33 companies showed that during
11 the eight-month period from January 1, 1960 to August
12 31, 1960, these 33 firms sent out a total of 891 pieces
13 of direct mail, or an average of 27 pieces per company.

14 Following is an analysis of these mailings:

Total No. of Mailings Over 8 Months	No. of Companies in each category
0 to 4 mailings	7 firms
7 to 12 mailings	7 firms
15 to 26 mailings	6 firms
34 to 47 mailings	9 firms
83 to 131 mailings	4 firms

22 This does not necessarily mean that each of
23 these mailings went to every doctor in Canada during
24 the eight-month period. Many of them were limited
25 mailings to certain types of specialists such as
26 pediatricians, obstetricians and gynecologists, radio-
27 logists, neurologists and psychiatrists, anaesthetists,
28 orthopedic surgeons and urologists, among others.

29 Sampling is another practice followed by the
30 industry when introducing new products to physicians,



so that the doctor can evaluate the use of the drug on patients. Samples are often given by doctors to patients as "starter doses", to be used until the patient can get a prescription filled. A number of physicians use samples for their indigent patients, and some companies actively support this practice.

Contrary to prevalent opinion, this advertising is not costly in relation to the retail price of drugs. A survey of 33 companies showed that these firms spent 6.5 per cent of their sales dollar on medical and pharmaceutical journal advertising, medical exhibits, direct mail, samples, and contributions to medical and pharmaceutical meetings. The breakdown is as follows:

<u>Type of Expenditure</u>	<u>Relation to the Manufacturers' Sales Dollar</u>
Journal Advertising	1.2¢
Direct Mail	2.2¢
Samples	2.7¢
Medical Exhibits & Space	.2¢
Donations to Meetings	<u>.2¢</u>
TOTAL	6.5¢

This means that if the industry stopped any part of its advertising, the saving to the patient would be negligible. On the other hand, if advertising were stopped entirely, volume would eventually decline and the per-unit cost would increase. As a result, the patient would wind up paying more for drugs over the long term.

Whether we call it advertising, information, education or promotion, it is still a vital function in



the distribution of pharmaceuticals in Canada. By meeting the doctor's need for prompt information on new drugs, by keeping him advised of current developments in existing drugs, and by maintaining large-scale production, this process of informing the doctor is irrevocably tied to the nationwide availability and low price of modern pharmaceuticals.

IN RESPECT TO HOSPITALS

Hospitals across Canada are naturally concerned about increasing costs. But what are the factors behind these costs? Earlier we reviewed the breakdown of the operating dollar of the drug companies. I now wish to do the same for hospitals. Following is an analysis of the major cost components for 207 general and special hospitals in Ontario for the year 1958, as reported by the Dominion Bureau of Statistics:

Statistics:

Gross Salaries & Wages	\$108,441,932	66.5%
General Services, Incl. Motor Service & Ambulances	16,487,263	10.0
Drugs, Surgical & Sterile Supplies	13,109,642	8.0
Physical Plant	7,304,541	4.5
Care of Patients	6,119,880	3.7
General Administration	5,328,220	3.3
Other expenditures	11,876,192	7.3
Less Frerquisites	-5,421,646	-3.3
Total Net Expenditure	\$163,246,025	100.0%



1
2 Separating drugs from surgical and sterile supplies,
3 and maintaining the 5 to 4 ratio mentioned by Mr. S. W.
4 Martin of the Ontario Hospital Association before this
5 Committee on June 16, drugs are only about 4.4 per cent
6 of the total net expenditure. This is a small percentage
7 in respect to the overall hospital operation. Yet it is
8 recognized that the curative properties of the newer
9 pharmaceuticals have been one of the major causes of
10 shortening the length of stay in hospitals over the
11 past two decades, thereby adding considerably to the
12 efficiency of operations. Nor can increasing hospital
13 costs be laid on the doorstep of drugs, when it is
14 considered that 68.5 per cent of the total increase in
15 Canadian hospital costs from 1957 to 1958 resulted from
16 a rise in salaries and wages. 50/

17 There has been phenomenal progress in hospital
18 care in Canada over the past 15 years, and the adminis-
19 tration of our hospitals is more efficient than ever
20 before. Spiralling costs of operation are a direct
21 reflection of the general rise in the economy of the
22 nation, and we must be extremely careful that attempts
23 to reduce operating costs are not done at the expense
24 of the patient's health.

25 In respect to drugs, hospitals have a grave
26 responsibility in the selection of effective and safe
27 pharmaceuticals. The system of purchasing by generic
28 name can carry with it serious consequences, if that
29 system is based on price alone. In a resume of
30 recommendations of the Joint Pharmacy Therapeutic



1
2 Committee of the Associated Hospitals of Alberta. it
3 was stated in referring to drugs: "Only quality products
4 from reputable manufacturers should be purchased and
5 utilized; false economy harms only one person - the
6 patient." 51/

7 This problem of price vs. patient has become
8 of vital concern in the United Kingdom as well as in
9 Canada, as is borne out by the following letter which
10 appeared in the British medical journal, The Lancet:

11 "During the past week we have admitted to
12 hospital two patients with Cushing's syndrome who have
13 undergone bilateral adrenalectomy. They have hitherto
14 been well controlled on cortisone, and without exposure
15 to infection or other stress both had developed signs
16 and symptoms of adrenal insufficiency. Anorexia, nausea,
17 excessive tiredness, lethargy, and inability to keep
18 warm occurred while on maintenance doses of 50 mg. of
19 cortisone.

20 "Inquiry showed that both these patients had
21 recently received cortisone tablets from a new batch.
22 These tablet were bought by the hospital pharmacy through
23 the Teaching Hospitals Contracting Committee at a price
24 approximately 40% less than the normal hospital price.
25 They are manufactured in this country from material
26 originating from the Continent. The tablets are slightly
27 larger than those hitherto purchased and patients have
28 noticed that they do not break up so readily in the
29 mouth. Samples submitted before the contract was placed
30 complied fully with all the tests of the British



1
2 Pharmacopoeia, but subsequent investigation of batches
3 which have proved unsatisfactory were found to have a
4 disintegration time longer than the B.P. requirements.

5 "Adrenalectomized patients and those with
6 Addisons disease are dependent upon cortisone replacement
7 for their well-being, and indeed for their continued
8 existence. The circulation of 'substandard' cortisone
9 tablets constitutes a hazard of the greatest magnitude
10 to such patients. We know that these tablets have been
11 purchased by other hospitals and feel that physicians
12 should be aware of their existence since they may be
13 the cause of unexpected adrenal insufficiency in their
14 patients." 52/

15 No thinking Canadian wants second-best
16 medication, and when he is at home he can ensure that
17 his family physician and pharmacist prescribe and dispense
18 for his family the finest drugs available. But he
19 cannot be certain of this when he is in a hospital which
20 insists that doctors prescribe by generic name, because
21 the freedom of choice has been removed from the doctor
22 and placed in the purchasing department.

23 This is not a criticism of hospital pharmacy
24 and therapeutic committees which through a system of
25 formulary limit the number of similar brand name drugs
26 carried in the hospital pharmacies. But it most
27 definitely is an indictment of generic name purchasing
28 which forces both the doctor and the patient to use drugs
29 which have been bought on the sole basis of price.

30 There is a legal as well as moral side to this



1 question. The onus of responsibility for the effect of
2 a drug on a patient rests with the doctor who prescribes
3 and the pharmacist who dispenses the preparation. In
4 prescribing by generic name, both retain that
5 responsibility but, at the same time, pass the decision
6 as to the quality and content of the medication over to
7 the purchasing department.
8

9 A patient injured by an inferior so-called
10 equivalent generic drug will have adequate remedies against
11 the dispenser, regardless of how price-conscious the
12 hospital may be. Regarding inferior medication under
13 brand name, the hospital can always set-off an action
14 against the manufacturer, for the products of the brand-
15 name company carry with them an implied warranty as to
16 quality. But it would take an interesting case to
17 determine responsibility on the part of an importer
18 who was in essence acting as an agent for a foreign
19 supplier of non-branded merchandise who, in turn, may
20 have bought the material elsewhere.

21 I earnestly hope that no Canadian will have
22 to test such a case, for it is probable that the action
23 will be brought by his heirs.

24 In commenting on the problems involved in
25 substituting so-called "equivalent" drugs at the
26 hospital and retail levels, the Hinchcliffe Committee on
27 Cost of Prescribing stated in its report to the U.K.
28 Ministry of Health: "It is unfair, in our opinion, to
29 impose on the pharmacist the onus of substituting an
30 equivalent preparation for the one prescribed. The



1 term 'equivalent' may be used in two different senses.
2
3 It may imply identical equivalent, where the identity is
4 susceptible to proof by chemical methods, but even with
5 products containing identical therapeutical substances
6 there may be pharmaceutical variations.

7 "The term 'equivalent' may also imply a
8 therapeutic equivalent which can only properly be decided
9 by the prescriber. Pharmacists should not be expected
10 to take the responsibility of deciding on the equivalent
11 ... Indeed it is possible that such substitution might lay
12 a pharmacist open to legal action by the manufacturer of
13 the product originally prescribed even if the
14 substitution were based on a list of equivalents."

15 After considering this and other aspects of
16 prescribing "equivalent" drugs, the Hinchcliffe Committee
17 concluded: "For these reasons we reject substitution
18 as a practical method of securing economies in the drug
19 bill. The only effective long term answer in our view
20 is to train doctors to prescribe critically and with
21 discrimination." 53/

22 THE ASSOCIATION

23 Having explained the importance of quality
24 control, ethical responsibility and the role of distri-
25 bution, I wish to explain briefly how these items have
26 been made a requirement of membership in the Canadian
27 Pharmaceutical Manufacturers Association, which is now
28 celebrating its 46th birthday.

29 Quality control

30 The most important single requirement for



1
2 membership is proper quality control facilities. Our by-
3 laws state in part that "... membership is open to firms
4 which manufacture in Canada, under proper conditions for
5 control of quality and standards, pharmaceutical
6 preparations..." In order to determine the company's
7 qualifications in this respect, 11 of the 21 questions
8 on our membership application form deal with quality
9 control. These are:

10 10. State name and qualifications of person
11 in charge of control.

12 11. State name and qualifications of person
13 authorized to release finished products.

14 12. State number and qualifications of chemists
15 in control department.

16 13. Broadly describe control laboratory and give
17 approximate floor area.

18 14. List principal equipment in control
19 laboratory.

20 15. Check type of laboratory analysis made:
21 a. physiological, b. biological, c. chemical,
22 d. bacteriological.

23 16. State whether each product batch is
24 identified by code throughout manufacture and
25 distribution.

26 17. State extent to which raw materials are
27 analyzed to assure their integrity.

28 18. State extent to which finished products
29 are analyzed to assure their integrity.

30 19. State extent to which products requiring



1
2 biological tests are so examined; and state
3 reasons for any omission of such tests.

4 20. Name those who do outside control work for
5 you and describe it. 54/

6 When these questions have been answered and
7 submitted by the applicant, the form is then turned over
8 to our Membership Committee for processing. Two Directors
9 are then required to visit the premises of the applicant
10 and determine whether the statements made are correct.
11 If the applicant does not meet these requirements, then
12 he is not eligible for election to membership.

13 Ethical Responsibility

14 Applicants for membership are also required
15 to sign an agreement that they will abide by the Principles
16 of Ethics of the Association. These include:

17 1. The calling of a pharmaceutical manufacturer
18 is one dedicated to a most important public service, and
19 such public service shall be the first and ruling con-
20 sideration in all dealings.

21 2. The pharmaceutical manufacturer must
22 produce his preparations only under proper conditions
23 and with scrupulous faithfulness to required standards
24 of quality.

25 3. Preparations must be labelled and
26 merchandised only in a manner free from misrepresentation,
27 misleading practices of all kinds and in entire harmony
28 with the highest standards of commercial morality and
29 professional ethics.

30 4. Pharmaceutical manufacturers must constantly



1 and conscientiously strive to advance the science and
2 elevate the calling of manufacturing pharmacy to the
3 highest plane of public value, to the end that it may
4 best and most completely serve the medical profession
5 and the public. 55/

6 Advertising

7
8 On June 15, 1959, our Association adopted an
9 extensive list of "Principles of Ethical Drug Promotion",
10 a copy of which is attached under Appendix D. Briefly,
11 this requires that all advertisements of member companies
12 shall contain "complete, conservative and accurate
13 information concerning medicinal agents", and that claims
14 shall not be stronger than warranted by the evidence.

15 We have machinery in our by-laws to deal with
16 companies which may take action contrary to these
17 principles, but we have not as yet had cause to put this
18 machinery into motion.

19 IN CONCLUSION

20 As Dr. Brian Dixon points out in his attached
21 report, pharmaceutical manufacturing in Canada is a
22 highly competitive industry. Furthermore, this
23 "competitive activity is generally directed in a manner
24 which is socially desirable." It has been responsible
25 to a material extent for the countless new life-saving
26 drugs which have been a boon to our health and economy
27 over the past two decades, and for the history of price
28 reductions over the years which in itself is an enviable
29 record.

30 These factors are also evidence that no



1 monopoly exists in drug manufacturing in this country,
2 for monopoly is resistant to change and change has long
3 been an inherent attribute of this industry.
4

5 It is obvious from the foregoing that a
6 competitive system of Canadian free enterprise has resulted
7 in countless benefits to our people in the form of
8 greater longevity and improved health. I will not say
9 that our industry is without problems, for many do exist
10 in the growing pains which accompany progress. But our
11 companies are striving to overcome these problems and,
12 in finding the answers, are operating in the best public
13 interest.

14 As Dr. H. M. Horner of Alberta said recently
15 in the House of Commons: "We must make sure that the
16 Canadian pharmaceutical industry develops on a par with
17 other countries, that our medical research program is not
18 hampered and that there is no restriction in getting
19 drugs to the patients who require them." 56/ To iterate,
20 Canada has a great future, but the decisions we make
21 today will determine the heritage of tomorrow and these
22 decisions cannot and should not be taken lightly.

23 I wish to thank you for your courtesy in
24 accepting such a lengthy presentation, but as I mentioned
25 earlier, it takes seconds to say that "drugs cost too
26 much", and hours to tell the factual story. It is my
27 sincere hope that this report to your Committee has given
28 you and Canadians everywhere a better appreciation and
29 understanding of our industry.
30



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Canadian Pharmaceutical Manufacturers Association

APPENDIX A

C. P. M. A. MEMBER COMPANIES

Abbott Laboratories Ltd.

Ames Co. of Canada Ltd.

Anca Pharmaceuticals, Div. of The Wander Co. of Canada Ltd.

Anglo-French Drug Co. Ltd.

Arlington-Funk Laboratories Div., U.S. Vitamin Corp. of
Canada Ltd.

Astra Pharmaceuticals (Canada) Ltd.

Ayerst, McKenna & Harrison Ltd.

Baxter Laboratories of Canada Ltd.

Beecham Research Laboratories Ltd.

Bristol Laboratories of Canada Ltd.

The British Drug Houses (Canada) Ltd.

Burroughs Wellcome & Co. (Canada) Ltd.

Casgrain & Charbonneau Ltee.

Ciba Co. Ltd.

Charles E. Frosst & Co.

Geigy Pharmaceuticals, Div. of Geigy (Canada) Ltd.

Glaxo-Allenburys (Canada) Ltd.

J. F. Hartz Co. Ltd.

Hoechst Pharmaceuticals of Canada Ltd.

Hoffmann-La Roche Ltd.

Frank W. Horner Ltd.

Ingram & Bell Ltd.

Laboratoires Nadeau Ltee.

Lakeside Laboratories (Canada) Ltd.

Laurentian Laboratories Ltd.

Lederle/Cyanamid of Canada Ltd.



ANGUS, STONEHOUSE & CO. LTD.
TORONTO, ONTARIO

Conder

1127

- 1 Eli Lilly & Co. (Canada) Ltd.
- 2 Mallinckrodt Chemical Works Ltd.
- 3 May & Baker (Canada) Ltd.
- 4 Mead Johnson of Canada Ltd.
- 5 Merck & Company Ltd., Merck Sharp & Dohme Div.
- 6 The Wm. S. Merrell Co.
- 7 Mowatt & Moore Ltd.
- 8 Ortho Pharmaceutical (Canada) Ltd.
- 9 Parke Davis & Co. Ltd.
- 10 S. B. Penick & Co.
- 11 Pfizer Canada, Div. of Pfizer Corp.
- 12 Pitman-Moore of Canada Ltd., E. B. Shuttleworth Div.
- 13 H. Powell Chemical Co. Ltd.
- 14 Rougier Inc.
- 15 Sandoz Pharmaceuticals, Div. of Sandoz (Canada) Ltd.
- 16 W. E. Saunders Ltd.
- 17 R. P. Scherer Ltd.
- 18 Schering Corp. Ltd.
- 19 G. D. Searle & Co. of Canada Ltd.
- 20 Smith Kline & French Inter-American Corp.
- 21 E. R. Squibb & Sons of Canada Ltd.
- 22 Strong Cobb Arner of Canada Ltd.
- 23 The Upjohn Co. of Canada
- 24 Henry K. Wampole & Co. Ltd.
- 25 Warner-Chilcott Laboratories Co. Ltd.
- 26 Charles R. Will & Co. Ltd.
- 27 Winthrop Laboratories of Canada Ltd.
- 28 John Wyeth & Brother (Canada) Ltd.
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Canadian Pharmaceutical Manufacturers Association

APPENDIX BEXAMPLES OF PRICE REDUCTIONS IN CANADA
(Based on suggested list prices)

<u>Product No.</u>	<u>Introduced</u>	<u>- Price</u>	<u>No. of Reductions</u>	<u>Current List Price</u>	<u>% Decline</u>
1	Mar. 1955	- \$12.00	2	\$ 7.10	41%
2	Feb. 1956	- 7.50	1	5.25	30
3	Aug. 1959	- 10.80	2	7.50	30
4	May 1951	- 4.10	4	1.30	68
5	May 1956	- 5.00	1	4.00	20
6	May 1951	- 2.20	2	.65	70
7	Jan. 1959	- 19.25	1	13.25	31
8	Jan. 1953	- 2.25	1	1.75	22
9	Sep. 1952	- 6.00	4	2.60	57
10	Sep. 1957	- 3.65	1	2.25	38
11	Mar. 1954	- 4.50	3	2.40	47
12	1957	- 2.00	1	1.50	25
13	Jan. 1956	- 1.65	1	1.25	24
14	Jun. 1955	- 2.50	2	1.70	32
15	May 1958	- 1.25	1	1.00	20
16	Jan. 1957	- 4.00	2	2.10	47
17	Sep. 1955	- 4.00	1	2.60	35
18	Feb. 1959	- 7.25	1	4.65	36
19	Sep. 1957	- 3.25	1	2.00	38
20	Sep. 1957	- 3.60	1	2.25	38
21	Sep. 1954	- 3.63	1	2.97	18
22	Sep. 1954	- 2.46	2	2.02	18
23	Sep. 1954	- 1.05	1	1.03	2
24	Sep. 1954	- .82	1	.77	6
25	Nov. 1954	- 2.30	1	1.89	18
26	Nov. 1954	- 1.83	1	1.50	18
27	Mar. 1952	- 3.85	1	2.50	35
28	Oct. 1959	- 15.75	1	12.00	24
29	--	- 3.25	--	2.70	17
30	Mar. 1953	- 10.10	4	5.35	47
31	Oct. 1956	- 12.00	5	4.30	64
32	(1955)	- 4.75	3	2.30	51
33	(1955)	- 11.35	1	9.60	15
34	Apr. 1959	- 8.20	1	7.35	10
35	1949	- 2.50	5	.63	75
36	Apr. 1950	- 9.85	8	1.50	86
37	Jan. 1951	- 6.60	8	1.13	83
38	(1955)	- 4.95	--	3.90	21
39	(1955)	- 10.50	--	6.75	26
40	(1955)	- 7.00	--	5.75	18
41	Apr. 1956	- 3.75	1	2.75	27
42	Apr. 1956	- 4.65	1	3.50	25

43	Aug. 1959	-	3.30	1	2.25	31
44	Apr. 1959	-	5.85	2	4.85	17
45	Apr. 1959	-	10.60	2	6.90	33
46	Nov. 1955	-	19.00	2	11.40	40
47	Feb. 1956	-	21.25	2	14.50	31
48	Jan. 1957	-	6.75	1	5.25	22
49	Nov. 1955	-	8.35	1	7.75	7
50	--	-	11.50	1	9.00	22
51	--	-	3.75	1	3.25	13
52	--	-	4.50	1	3.50	22
53	--	-	5.25	1	3.75	29
54	--	-	6.50	1	4.25	35
55	--	-	3.65	1	3.00	18
56	--	-	4.75	1	3.50	26
57	--	-	5.45	2	4.00	27
58	--	-	2.55	1	2.00	22
59	Feb. 1955	-	6.85	1	6.50	5
60	--	-	5.95	1	5.50	8
61	Nov. 1953	-	4.25	--	2.55	40
62	Nov. 1953	-	20.00	--	12.00	40
63	Nov. 1953	-	7.50	--	4.50	40
64	Nov. 1953	-	9.75	--	8.30	15
65	Feb. 1959	-	6.55	1	4.85	26
66	Feb. 1959	-	11.85	1	6.90	42
67	--	-	6.05	2	5.10	16
68	--	-	4.90	1	3.19	35
69	--	-	.81	1	.59	27
70	(1955)	-	11.00	1	8.35	24
71	Mar. 1957	-	4.50	1	4.00	11
72	(1955)	-	6.50	1	2.75	58
73	(1955)	-	8.50	1	6.50	23
74	(1955)	-	6.00	1	4.90	18
75	--	-	6.50	--	4.50	31
76	(1958)	-	10.00	--	7.50	15
77	--	-	11.50	--	9.35	19
78	--	-	7.50	--	4.50	40
79	--	-	2.10	--	1.80	14
80	--	-	5.65	--	4.75	16
81	--	-	3.95	--	3.45	13
82	--	-	1.70	--	1.35	21
83	--	-	1.70	--	1.45	15
84	--	-	8.33	--	6.25	24
85	(1958)	-	6.00	2	3.60	40
86	(1957)	-	12.00	3	7.10	41
87	1959	-	9.10	1	7.50	17
88	(1958)	-	7.20	2	5.20	29
89	(1957)	-	6.00	2	3.60	40
90	1958	-	7.20	2	5.20	29



Canadian Pharmaceutical Manufacturers Association

APPENDIX C

SOME REASONS BEHIND THE DIFFERENCE IN PRICE

between

CANADIAN AND U.S. PHARMACEUTICALS

REASONS WHY CANADIAN PRICES SHOULD BE HIGHER

Briefly, there are six main reasons why the price of pharmaceuticals should be higher in Canada than in the U.S.:

1. Canadian drugs carry a Federal sales tax of 11 percent; U.S. drugs do not.
2. Most manufacturing equipment must be imported from the U.S., at a cost of anywhere from $7\frac{1}{2}$ - 20 per cent more than that paid by the U.S. manufacturer for the same equipment.
3. The Canadian market is considerably smaller than that in the U.S. and therefore less adaptable to savings through large mass production operations.
4. Per unit costs are higher in Canada than in the United States.
5. Because of the widely dispersed Canadian market, the Canadian manufacturer must pay more in transportation and distribution costs than his U.S. counterpart.
6. Around 17 per cent of all pharmaceutical and medicinal products sold in Canada are imported, thereby cutting down still further on the size of the domestic market for Canadian manufacturers.



1
2 Here are the detailed facts:

3 TAXES ARE HIGHER

4 On pharmaceuticals manufactured in Canada,
5 there is an 11 per cent sales tax. There is no similar
6 Federal tax in the United States, which means that by this
7 factor alone Canadian costs at wholesale are eleven cents
8 more on every dollar for drugs than in the U.S.

9 MACHINERY COSTS MORE

10 The majority of machinery and equipment used in
11 manufacturing Canadian drugs is imported from the U.S.
12 and some other countries. Most of it is not made in
13 Canada. Consequently, the Canadian manufacturer must pay
14 the U.S. price for these essential materials plus the
15 import tariff. The tariff on this type of equipment
16 ranges from $7\frac{1}{2}$ to 20 per cent, and means that the Canadian
17 manufacturer must pay that much more for his goods than
18 the U.S. manufacturer.

19 THE CANADIAN MARKET IS SMALLER

20 In any manufacturing operation, the size of the
21 market invariably determines the per unit cost of the
22 product. The U.S. manufacturer today has a domestic
23 population of approximately 171,500,000 and the corres-
24 ponding markets over which to spread his costs of
25 production. The Canadian manufacturer, operating in a
26 country with around one-tenth the population, must spread
27 his costs over correspondingly smaller markets.

28 Another reason that the ratio of population to
29 market potential in Canada is smaller than that of our
30 neighbour to the South may be found in imports to this



1 country. United States and other foreign-based manufac-
2 turers sell a large percentage of drugs used in this country.
3 For example, about 17 per cent of the pharmaceuticals sold
4 in Canada in 1948 were imported. Obviously, this has a
5 tendency of cutting down still further on the size of the
6 market available to the Canadian manufacturer.
7

8 Nor is this bilateral. We do not export drugs
9 in any quantity to the United States because the per unit
10 cost of manufacture is higher in this country than in the
11 U.S. In addition, the U.S. imposes stringent customs
12 barriers against Canadian goods which could be competitive
13 in their markets. Aside from their level of tariff, the
14 U.S. customs appraisers place on Canadian dutiable goods
15 an import evaluation that is almost entirely based on
16 arbitrary factors. Canada on the other hand, has
17 established values for duty of import. These and other
18 factors make it economically difficult for the Canadian
19 manufacturer to sell his pharmaceuticals in the United
20 States.

21 We might add that this is merely by way of
22 explaining the import-export situation. It is not to be
23 interpreted as a request for an increase in tariffs,
24 although we would like to have a fairer evaluation made
25 on Canadian goods going into the U.S.

26 PER UNIT COSTS ARE HIGHER

27 It is a general rule in manufacturing that the
28 larger the volume produced, the more elaborate the
29 production line. And the more elaborate the production
30 line, the less man-hour cost per unit of production.



1
2 Because of our smaller market, Canadian manufacturers
3 cannot afford to take advantage of the elaborate mass-
4 production facilities used in U.S. plants. Were one of our
5 companies to do so, they could produce enough drugs in
6 one month to supply their market for one year.

7 For this reason, more man-hours of labour go
8 into our Canadian drugs and our manufacturers pay a higher
9 per unit labour cost than do U.S. manufacturers.

10 DISTRIBUTION COSTS ARE HIGHER

11 In any economic comparison between manufacturing
12 facilities in Canada and the U.S., consideration must be
13 given to the cost of transportation and distribution.
14 Because our country is not as densely populated as the
15 U.S., Canadian manufacturers must spread their sales
16 from coast to coast, over 4,362 miles, in order to capiti-
17 alize on the wide-spread Canadian market. Consequently,
18 the majority of Canadian drugs sell for the same price
19 in B.C. as they do in Ontario or Nova Scotia.

20 Significantly, the U.S. manufacturer operating
21 out of New York, for instance, can get the same domestic
22 population potential in New York State alone.

23 Manufacturing pharmacy is considered to have one
24 of the most efficient distribution systems of any industry
25 in Canada. Speed of shipment, especially in time of
26 crisis, is a requisite of the manufacturers.

27 Because modern therapeutic discoveries have no
28 boundaries of need, the newest pharmaceutical must be
29 available to the most isolated dispensary at the same time
30 that it goes into the pharmacies in the particular



1
2 manufacturer's area. Consequently, the cost of shipment
3 is high in this business.

4 IN CONCLUSION

5 There are, of course, a number of other factors
6 which enter into the price differential picture, but in
7 the main these are the prime reasons for the difference
8 in price between pharmaceuticals in the two countries.

9 The problem on our doorstep is that of having
10 a relatively small market. Canada is undergoing growing
11 pains both in her population and manufacturing resources,
12 and there is every reason to believe that many of these
13 problems will be overcome in the years ahead. In the
14 meantime, however, to compare manufacturing prices between
15 a country of our size and that of a nation with the
16 extensive markets and manufacturing facilities of the
17 U.S. is an economic impossibility.

18 Nor is this problem peculiar to pharmaceutical
19 manufacturers alone. In fact, cars cost more in Canada
20 than they do in the U.S. and the same is true of
21 electrical appliances, in addition to almost every other
22 line of manufactured goods.

23 In the face of this, there are some who say
24 Canada should do away with tariffs on U.S. imports, and
25 permit free entry of goods into Canada. To recognize
26 the implications, one has only to visualize the export-
27 import picture between Canada and the U.S.

28 Obviously, the enormous influx of U.S. goods
29 into this country has a greater impact on our considerably
30 smaller economy and gross national product than our exports



1
2 would, in turn, have on their economy. Probably the
3 most significant point here is that for the most part
4 Canada imports finished goods from the U.S., which compete
5 with goods manufactured here, while the U.S. imports
6 mainly raw materials to keep its wheels of industry turning.
7 It is apparent that the phenomenal growth of secondary
8 industry in this country in recent years has been
9 responsible to a large degree for what we call the
10 Canadian economic boom. Secondary industry now represents
11 a larger net output than agriculture and primary industries
12 combined, and any significant drop in manufacturing
13 production is bound to seriously effect the nation as a
14 whole.

15 Although the production of the Canadian
16 pharmaceutical manufacturing industry forms but a small
17 part of this economic picture, along with other similar
18 Canadian industries it nevertheless comprises a healthy
19 percentage of the total Canadian economy.
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Canadian Pharmaceutical Manufacturers Association

APPENDIX D

PRINCIPLES OF ETHICAL DRUG PROMOTION

We, members of the Canadian Pharmaceutical Manufacturers Association, recognizing our responsibilities and obligations to promote the public welfare and to maintain honourable relations with the medical and pharmaceutical professions, with associated sciences, and with the public, do pledge ourselves to the following statement of principles:

1. Prompt, complete, conservative and accurate information concerning medicinal agents shall be made available to the medical and pharmaceutical professions;

2. Any statement involved in product promotional communications must be supported by adequate and acceptable scientific evidence. Claims must not be stronger than such evidence warrants. Every effort must be made to avoid ambiguity and implied endorsements. Whenever market, statistical or background information or references to unpublished literature or observations are used in promotional literature, the source must be available to the physician upon request;

3. Quotations from medical literature or from the personal communications of clinical investigators in promotional communications must not change or distort the true meaning of the author;

4. If it is necessary to include comparisons of drugs in promotional communications, either written or verbal, such comparisons must be used only when they are constructive to the physician and made on a sound



1
2 professional and factual basis. Trade marks are private
3 property that can be used legally only by or with the
4 consent of owners of trade marks;

5 5. The release to the lay public of information
6 on the clinical use of a new medicinal agent or the new
7 use of an established drug prior to adequate clinical
8 assessment and presentation to the medical profession is
9 not in the best interests of the medical profession or the
10 layman;

11 6. All medical claims and assertions contained
12 in promotional communications shall have medical review
13 prior to their release.

14 Any violation of these principles brought to
15 the attention of the General Manager of the Canadian
16 Pharmaceutical Manufacturers Association shall be
17 referred by him to the Board of Directors.

18 Adopted on June 15, 1959.
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21 (Page 1150 Follows)
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2 MR. CONDER: Mr. Chairman, might I ask that
3 the Appendices that appear at the back be entered into
4 the record without being read?

5 THE CHAIRMAN: Yes. They will be co-
6 related to the brief, and reference to pages 76, 77,
7 78, should be detailed, similarly page 79, Appendix
8 A, Canadian Pharmaceutical Manufacturers Association
9 Member Companies, page 80, Appendix B on pages 81 and
10 82 should be entered and that is to be co-related with
11 the confidential information you filed.

12 MR. HUME: Mr. Chairman, I think that the
13 appendix should be read into the record as read, but
14 we hope that the co-relation will not appear in the
15 record, as it is confidential. We hope it will be
16 co-related by the Committee for their use and not appear
17 on the record.

18 THE CHAIRMAN: That is correct. Appendix B
19 as is on page 81 and 82. Mr. Hume, back on page 61
20 there are six reasons given having to do with the
21 difference in drug prices in Canada and the United
22 States. Are those the same?

23 MR. HUME: If you look at page 62, Mr.
24 Chairman, you will see that a detailed expansion of those
25 is in Schedule C. Mr. Conder was not planning to read
26 that unless your Committee would wish him to. It is
27 merely an expansion as stated on page 62. Appendix C
28 is merely a further expansion of the six reasons.

29 THE CHAIRMAN: Is that agreeable to the
30 Committee, to have this taken into the record without



1
2 reading it?

3
4 --- Agreed to.

5 THE CHAIRMAN: Appendix C on pages 83, 84,
6 85, 86 and 87, will be taken into the record as read.
7 Appendix D on page 88 I think should be taken into the
8 records too.

9 MR. HUME: Mr. Condor having finished his
10 submission, it will be my intention to call upon Dr.
11 Brian Dixon and I wondered if the Committee would intend
12 to take a short break, or shall we proceed?

13 THE CHAIRMAN: We will adjourn for five
14 minutes.

15 MR. BRYDEN: Before we adjourn, could I
16 inquire why the actual names of the products referred to
17 in Appendix B are to be considered confidential?

18 MR. CONDER: As a trade association, Mr.
19 Bryden, we cannot frankly get into any area of prices,
20 of company prices and other factors. If we solicited
21 prices from our companies and in turn made these
22 available to our companies again, that might be some
23 implication of collusion of one form or another.

24 MR. BRYDEN: Would not all those prices
25 appear in manufacturers' price lists in any case?

26 MR. CONDER: Yes sir. We might have gone
27 a little too far.

28 MR. BRYDEN: Couldn't a small manufacturer
29 get a price list of his competitor? Aren't they
30 published and sent to druggists? It seems to me it



1
2 creates a little difficulty in discussing these things
3 for Committee members if these are to be included and
4 referred to by name. /

5 MR. CONDER: I am quite prepared with our
6 legal counsel's concurrence to leave it to the discretion
7 of the Committee.

8 MR. HUME: Mr. Chairman, I can appreciate
9 Mr. Bryden's problem, but it was my advice that I had
10 given sincerely that this Association should not in any
11 way engage in any activity even in these Committee
12 hearings that might bring it under any criticism of
13 the Combine's people in Ottawa. Therefore, it was my
14 recommendation and advice that they have this done by
15 an independent outside firm, which they have done. The
16 compilation of the result, if it was to be distributed
17 publicly, would include our own members, and we would
18 be under criticism.

19 I think it was made clear to the companies
20 that this information would not be turned over to the
21 Committee. I do not think we are trying to be cute
22 about it, but it was merely our position regarding
23 these prices was that there would be no suggestion that
24 any information about prices pass through the
25 Association's office.

26 That is the explanation, Mr. Chairman and Mr.
27 Bryden, but it is your information. I do not think it
28 has to be confidential in the sense that you cannot
29 refer to it, but we do not want it to appear in our
30 records.



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2 MR. BRYDEN: It is a confidence problem
3 rather than bringing the individual --

4 MR. HUME: Absolutely. I am trying to
5 protect the Association. That is the problem.

6 THE CHAIRMAN: I think the point is well
7 taken, Mr. Hume, and having in mind the statements that
8 you made in our original terms of reference, that we
9 have this problem and certain matters being under
10 investigation by another body, I think the information
11 that you have in mind, Mr. Bryden, will evolve in
12 future sessions on a more specific basis perhaps by
13 individual companies rather than through the
14 Association.

15 MR. BRYDEN: When we get into individual
16 companies, will they appear at all?

17 THE CHAIRMAN: I would think it reasonable
18 to expect that there may be some question of specifics,
19 if we might use that word. But as stated earlier, I
20 think in this brief, I think individual statements from
21 the company should come from that company itself and
22 not the Association.

23 MR. WREN: Before the witness stands down
24 I wanted to ask one question to clear my mind on
25 Appendix C. You make a point of distinguishing
26 between a sales tax in Canada and the absence of one
27 in the United States. You avoid mentioning whether or
28 not there is any State sales tax applied to these drugs
29 manufactured in the United States.

30 MR. CONDER: I honestly don't know what the



1
2 individual State position would be, Mr. Wren.

3 MR. WREN: My question is, are any of the
4 States levying taxes on drugs?

5 MR. HUME: I think the answer, Mr. Wren,
6 is that is so, but it is not part of costs against the
7 customer but is added as a direct tax and the customer
8 pays it in the end, but it does not appear as part of
9 the price.

10 Mr. Chairman, the witness is not going to
11 stand down, in case there is any misunderstanding and
12 after the short break, I will call on Dr. Dixon to deal
13 with Volume 2.

14 THE CHAIRMAN: In our examination that will
15 enable us to deal with both of them?

16 MR. HUME: Yes.

17 THE CHAIRMAN: We will have a five minute
18 break.

19
20 --- Short recess.

21 MR. HUME: Mr. Chairman, before I call
22 upon Dr. Dixon, I would like to correct something that
23 I said just before the adjournment, that is apparently
24 not entirely accurate. In answering Mr. Wren of the
25 Committee, I indicated that it was my understanding
26 that the sales tax in the United States was a tax added
27 on the price and passed on to the consumer.

28 This, I am told, is an accurate statement,
29 but it only tells half the story; it is quite true
30



1
2 for some States with regard to patent medicines or drugs
3 sold over the counter where the public purchased the
4 drugs, whereas, I am reliably informed, and I think
5 this can be verified - I will check this to make
6 absolutely sure - I think for the present discussion
7 except perhaps in odd incidents there is no State tax
8 on prescribed pharmaceutical products.

9 THE CHAIRMAN: Would this be an appropriate
10 time, Mr. Hume, while it is fresh in our minds to ask
11 you at what level and where the Canadian Sales Tax
12 was applied?

13 MR. HUME: Well, it is my understanding
14 I will make an off-the-cuff answer with all the risks
15 that are involved in that, they were applied at the
16 manufacturers' level, is deducted by the - is charged
17 by the manufacturer, remitted by the manufacturer.
18 If that statement is not correct, I will certainly see
19 that an appropriate letter is written to the Committee.

20 Mr. Chairman, as the second chapter in our
21 presentation I am going to call upon Dr. Brian Dixon
22 who has been introduced on page 1 of the main submission,
23 as Assistant Professor, Commerce and Business Administration
24 Queen's University and rather than have me read out the
25 list of Dr. Dixon's qualifications and have him merely
26 say yes, that is right, he is not a modest man, he
27 won't object to telling his own qualifications to the
28 Committee. I am going to ask him to do that and then
29 present his Economic Analysis.

30 DR. DIXON: Mr. Chairman, I suppose the



1
2 relative information would be, first of all, where I
3 obtained my degrees: My B.A. from University of
4 Manitoba in Economics, my Master of Economics from the
5 University of Toronto and my Ph.D. from University of
6 Michigan in Marketing, Business Economics and Economic
7 Theory.

8 I have taught at Assumption University in
9 Windsor, University of Michigan, at McMaster's University
10 and I am presently teaching at Queen's where I teach
11 Marketing at the undergraduate level, and Business
12 Economics at the graduate level in the newly formed
13 School of Business.

14 I have consulted for a number of different
15 firms - for the record, none of which have been in the
16 pharmaceutical industry. I have also been the author
17 of a number of articles and one book on the subject of
18 price discrimination and have also had varying degrees of
19 outside business experience along the way, although
20 primarily as an adjunct to my academic career.

21 THE CHAIRMAN: Thank you.

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1 AN ECONOMIC ANALYSIS
2 of the

3 PHARMACEUTICAL MANUFACTURING INDUSTRY IN CANADA
4 submitted to

5 STANLEY N. CONDER
6 General Manager
7 Canadian Pharmaceutical Manufacturers Association
8 by

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11 Kingston, Ontario

12 SEPTEMBER 15, 1960

13 INTRODUCTION

14 In attempting to make an economic analysis of
15 the pharmaceutical manufacturing industry in Canada, one
16 is faced with the problem of the limited availability of
17 statistical material. Generally speaking, statistics
18 relevant to the industry are rather scarce in Canada. In
19 addition, the period of years for which data have been
20 available specifically referring to the industry have
21 been very short from some sources, and lacking in
22 adequate detail in others. This makes it necessary to
23 restrict the quantitative aspects of the analysis to a
24 relatively short period of time (6 yrs. - 10 yrs.,
25 depending on the data). This creates the danger that the
26 time period will be too short to give an accurate picture,
27 and also too thin within the time period. Wherever it
28 appears reasonable, as a result, apparent trends beyond
29 the confines of the data are indicated, and much of the
30 analysis is in qualitative, rather than purely quantitative
terms.

An additional problem occurs in that the two
main sources of data, Taxation Statistics, from the



1 Department of National Revenue, and the Annual DBS report
2 on the Medicinal and Pharmaceutical industry, do not have
3 their statistics arranged in completely compatible fashion.
4 In the DBS report, information is based on factory sales
5 figures, while in the taxation data final sales figures
6 including freight and distribution expense are used.
7 Also the taxation figures refer only to incorporated
8 enterprises, while the DBS data includes partnerships and
9 proprietorships as well. This last difference is not
10 felt to be particularly significant, as the incorporated
11 firms form the preponderant majority of the firms in the
12 industry, and would appear to have an even higher proportion
13 of the industry sales. It is not felt that the problem
14 of incomplete compatibility will distort the analysis,
15 provided that the particular source is kept in mind when
16 the data are viewed. Throughout the report the source
17 will be indicated to facilitate this. Might I just inter-
18 ject, that I have deliberately chosen to use readily
19 available statistical material, primarily because it is
20 the best available, but also in terms of striving at what
21 I have to, in my position, as high a degree of authenticity
22 as I can muster.

23 The most significant approach in evaluating
24 the industry from an economic point of view is to examine
25 the state and nature of competition in the industry.
26 Within this general framework, economic aspects of the
27 industry can be examined from a consistent base. Also,
28 in view of the considerable interest at present, in the
29 social impact of the industry, such an approach is par-
30 ticularly pertinent. If it appears that the industry is
competitive, then this provides the best indication of
favourable social behavior of the industry, as opposed to



an industry which was essentially monopolistic in character. Particularly relevant in this context is the area of growth and new product development and improvement, particularly in view of the industry's role in influencing the health standards of the country. No attempt will be made here to evaluate this health aspect. The relevant issue for this report is that whatever improvement in health standards are to be expected from the industry can be assured more effectively if the industry is more, rather than less, competitive.

As a general introduction, as will be indicated in detail in the report, it appears that the industry evidences a substantial degree of competition, evidencing itself in a variety of ways. This has contributed to a period of sustained growth, and what appears strongly to be a continual pressure towards new product development and improvement.

In making this analysis, factors indicative of the degree of competition in the industry will be evaluated. In the process a number of additional factors which are felt to be of general economic relevance will be considered at various stages of the analysis.

In evaluating the extent of competition in any industry (and this applies particularly to the pharmaceutical industry) it is to be remembered that competition in the economic system as it is structured today can and does take several forms. In addition to price competition, there can be quality competition, product improvement and new product development competition, service and distribution competition, and



1 promotional competition (sales force activity, advertising).
2 Of these, perhaps the most competitively explosive is
3 new product development. This is particularly so in view
4 of the structure of present day industry, with firms
5 typically possessing substantial amounts of capital
6 investment, of a fixed nature. They thus have a degree
7 of immobility as far as movement out of the industry is
8 concerned. This makes the impact of new product
9 development all the more severe, since financially
10 comfortable exit from an industry is difficult if not
11 impossible because of the heavy fixed asset commitments.
12 Thus new product development provides a spur to
13 competitive efforts of the firms in the industry. In
14 addition, this particular aspect of competitive activity
15 has perhaps the most significant impact on economic
16 growth.
17

18 NUMBER OF FIRMS

19 In 1958, the Pharmaceutical Preparations
20 industry was composed of some 196 establishments, as
21 reported by the DBS report on the Medicinal and Pharma-
22 ceutical industry. (Hereafter referred to as the
23 Pharmaceutical Industry Annual). However, because of
24 the definition of the industrial classifications, this
25 does not include a number of firms which sold pharma-
26 ceuticals, although classified in some other industrial
27 grouping. These include chemical firms, food producers,
28 and other who, in the process of product diversification,
29 have moved into the pharmaceutical field. In fact, this
30 movement, which is not easily indicated in a direct



1 quantitative fashion from general statistics, but can
2 be readily observed individual company operations, would
3 appear to be a strong competitive pressure in the industry.
4 This is consistent with the strong competitive pressures
5 generally created in other industries when multi-line
6 producers move in. These new entrants, having their
7 main sales and profit support outside of the industry
8 they are entering, and presumably having some cost
9 advantage (such as of productive facilities) to have
10 moved in the first place, are able to compete on a
11 vigorous basis, and can often, if necessary, sustain
12 substantial losses over a period of time in order to
13 obtain a position in the market.

14
15 At the same time, these firms do not enter the
16 industry as green entrants, but bring with them success-
17 ful general management skills, and specific related
18 skills and techniques. Thus their entry cannot be
19 ignored by the present firms in the industry, and their
20 effect is generally significant. This pattern of events,
21 already occurring to a considerable degree in the
22 pharmaceutical industry, can apparently be expected to
23 continue. Since large firms (such as those from the
24 chemical industry) have been making this movement, the
25 degree of competitive pressure which they can be
26 expected to exert will likely be substantial, and
27 perhaps more than superficially indicated by the amount
28 of sales. These new and potential multi-line entrants,
29 particularly in view of the kinds of resources which
30 they bring, coupled with the number of firms indicated



1
2 as being primarily engaged in manufacturing within the
3 industry, indicate a substantial degree of competition,
4 as far as number is concerned. (See Table 1. for number
5 of establishments, 1950-58, and also for the somewhat
6 more inclusive compilation of corporations in the
7 Pharmaceutical Preparations Industry reported in the
8 Taxation Statistics, Department of National Revenue,
9 hereafter referred to as Taxation Statistics.)

10 I might add here that, I believe it is
11 significant, although these firms have the potential
12 facilities and have been moving in, to some degree, there
13 is no rush to get in in the sense of many of them pouring
14 in in great numbers.

15 They can enter; they have the facilities;
16 some of them are entering. The fact that they are not,
17 is to me at least, a qualitative indication of some of
18 the other indications of competition in the industry.
19 You would otherwise expect that, if you want, the
20 industry were a fat goose ready to be plucked, because
21 of monopolistic practices in the industry that there
22 would be a rush of firms to enter, which has not been
23 the case although some of them have been.

24 In other words, the industry is held
25 competitively as much by the possibility of entering
26 of these large firms as it is by their actual entry,
27 both of which have been in evidence.
28
29
30



TABLE 1

Year	Number of establishments in Medicinal and Pharmaceutical preparations industry (a)	Number of corporations in Pharmaceutical Preparations industry (b)
1950	210	
1951	206	
1952	213	
1953	217	184
1954	216	193
1955	210	202
1956	212	214
1957	207	220
1958	196	210

(a) Taken from annual reports by the Dominion Bureau of
Statistics on the Medicinal and Pharmaceutical
Preparations Industry

(b) Taken from Taxation Statistics, annual reports by
the Department of National Revenue.



1
2 CONCENTRATION

3 The degree of concentration in the industry
4 is difficult to measure due to the lack of available
5 statistics. This is compounded by the almost insigni-
6 ficant number of pharmaceutical firms which publish
7 annual statements, most being either privately owned
8 concerns, or subsidiaries whose reports are consolidated
9 in that of the parent company. However, a reasonably
10 good measure of concentration can be obtained from a
11 classification of establishments by sales volume found
12 in the Pharmaceutical Industry Annual.

13 In 1958, eight establishments shared 41% of
14 factory sales volume, and an additional 29 shared 43%
15 of the factory sales. Thus 37 establishments shared 84%
16 of the factory sales, with an additional 16 firms,
17 combining to share 90% of the business, the remaining
18 10% being shared by the other 143 firms. Thus the total
19 of firms in the industry as a raw statistic must be
20 modified by the fact that many of these establishments
21 are obviously very small ... However, the number of
22 establishments of significant sales volume, as indicated
23 in the Annual, does not indicate a particularly high
24 degree of concentration. It allows for several dozen
25 establishments with sales volumes and shares of the
26 market adequate to provide a vigorous stand in the
27 market. This degree of concentration is less than can
28 be found in a considerable number of other industries,
29 particularly in Canada, where the limited size of the
30 market tends to keep the number of firms small, and the

TABLE 2.

	1953	1954	1955	1956	1957	1958
	(millions of dollars for sales figures)					
No. establishments over \$5 million sales	4	4	3	4	7	8
Sales volume est. over \$5 million sales	24.4	23.7	19.6	26.9	49.5	63.7
No. establishments \$1 million-\$4,999,999	18	22	24	27	27	29
Sales volume est. \$1 million-\$4,999,999	34.2	41.8	55.2	66.7	63.0	66.5
No. establishments \$500-\$999,999.	27	25	24	17	16	14
Sales volume est. \$500-\$999,999.	19.6	17.3	17.5	11.6	10.8	9.2
No. of establishments in 3 groups as % of total	22.6	23.6	24.2	22.1	24.2	26.0
Sales volume of 3 groups as % of total	83.6	85.9	85.5	85.9	88.1	90.0



1
2 concentration quite high. At the least it can be regarded
3 as no more than a "typical" concentration. For example,
4 the Chemical and Allied Products Group, into which the
5 pharmaceutical industry falls, has a virtually identical
6 concentration of establishments, with 20% of the
7 establishments accounting for 84% of factory sales, as
8 compared with 19% accounting for 84% of factory sales
9 in the medicinal and pharmaceutical industry alone.

10 Comparing the figures for 1958 with the previous
11 years back to 1953 (when this information first began
12 to be published), it would not appear that there has
13 been any significant change in the concentration. In
14 1955, 24% of the establishments shared 85% of the
15 business, while in 1958 27% shared 90% of the business.
16 (See Table 2. for 1953-58 figures). When it is
17 considered that some of the smaller firms are regional
18 rather than national in market coverage, this tends to
19 increase the number of firms effectively competing for
20 market share in any given market. Although the regional
21 firms will be small in relation to the large national
22 firms, their sales volume in their own area can give
23 them a better relative position in that particular market.
24 In addition, with only regional distribution and promotion
25 with which to contend, instead of the relatively high
26 costs of both intensive and extensive distribution
27 over the limited Canadian market, the relative competitive
28 strength of some of these smaller firms is further
29 improved.

30 It would appear then, that the degree of



1 concentration in the industry is not of an order to
2 prevent effectively competitive conditions from prevailing
3 in the market, and further that the degree of concen-
4 tration vis-a-vis other industries appears to be such
5 that limits to effective competitive pressure are as low
6 as, if not lower than other industrial groupings in
7 Canada. It appears reasonable to expect comparable results
8 to those indicated in concentration studies by the
9 National Industrial Conference Board in the U.S. where
10 the pharmaceutical preparations industry ranked well
11 down in the lower half of all industries in size of its
12 concentration ratio. (Such a conclusion is indicated by
13 the analysis in Industrial Concentration, Royal Commission
14 on Canada's Economic Prospects, No. 23, prepared by the
15 Canadian Bank of Commerce. Note particularly page 31,
16 where concentration in the pharmaceutical preparations
17 industry is indicated as being low.) While on the
18 subject of the U.S. experience, it should be noted that
19 the Canadian Pharmaceutical preparations industry has
20 a substantially larger number of firms, proportionate
21 to the relative population of the two countries, than its
22 U.S. counterpart. (Approx. 1200 companies in the U.S.
23 as opposed to 200 in Canada, a 1-6 ratio, while the
24 population ratio is 1-10.)

25 PROFITS

26 As a measure of the extent of competition in
27 an industry, it is difficult to draw a direct inference
28 from the rate of profits. The rate can be influenced
29 by a rapid rate of growth in the industry, the amount
30



1 of risk the capital requirements of the industry; among
2 the most important elements. Therefore a direct
3 comparison with rates of return for other industries and
4 for manufacturing as a whole are not necessarily
5 definitive indications of the state of competition in
6 the industry when viewed in isolation. The analysis must
7 include an evaluation of the factors influencing the
8 rate of profits, and if the rate is not consistent with
9 the expected effects of these factors, then some
10 pertinent conclusions can be drawn. Of course, if the
11 rate of profit in the industry is substantially above
12 others in similar circumstances, this would legitimately
13 raise suspicions.

14 The issue is what is too high. As indicated
15 this cannot be evaluated in absolute terms, particularly
16 over a short period; since the relative immobility of
17 capital does not make for immediate adjustments in entry
18 and exit of firms, in response to more or less favorable
19 rates of return. Excluding an abnormally high rate of
20 return, the relevant question to ask concerning profits
21 is if they are appropriate to produce a level of growth
22 and activity in the industry which appears desirable.
23 In other words, provided that no profits except those
24 explainable in terms other than monopoly profits are
25 being taken, does the rate of profit which does exist
26 provide the kind of incentive which is necessary to
27 produce the results desired in the particular industry.

28 An examination of the rates of profit after
29 taxes as a percentage of net worth and as a percentage
30



1
2 of sales volume in the Pharmaceutical Preparations
3 Industry indicates that in the past 6 years, the rate of
4 return has been above that of the figure for all manu-
5 facturing. Compared to some other industrial groupings
6 with characteristics of fairly consistent growth, high
7 obsolescence, or high risk, the industry has not been
8 out of line, and some industries with similar character-
9 istics are far as risk, growth and obsolescence are
10 concerned have had higher rates over the period.

11 The average rate of profit after taxes as a
12 percentage of net worth for the industry from 1953-58
13 was 10.1%, compared with an all manufacturing average
14 of 5.3%. When one considers that the all manufacturing
15 figure includes a number of chronically depressed
16 industries and those which appear to be suffering a
17 secular decline, while the Pharmaceutical Preparations
18 industry is in a period of substantial growth, the
19 rate of 10.1% is not surprising or extreme. (Figures on
20 profits have been drawn from Taxation Statistics.
21 See Table 3. for detailed presentation of rates of return.)

22 Net profits after taxes as a percentage of
23 the sales dollar show a similar pattern, although the
24 industry figure is closer to that of the all manufactur-
25 ing average, and substantially below that of some other
26 industries. The six year average for the industry is
27 6.3% compared to 3.8% for all manufacturing.

28 As a general comment, reasons for which will
29 be indicated in the following discussion of factors
30 affecting the rate of profit in the industry, it is not

Table 3. Net Profit as a Percentage of Net Worth and of Sales ^a.

Year	1953%		1954%		1955%		1956%		1957%		1958%		Average %	
Industry	N.W.	Sales	N.W.	Sales	N.W.	Sales	N.W.	Sales	N.W.	Sales	N.W.	Sales	N.W.	Sales
Alcoholic Bev.	12.7	9.7	12.0	8.9	11.5	9.4	10.6	9.5	11.5	10.6	10.4	10.3	11.4	9.7
Aircraft and parts	12.4	2.2	8.2	2.0	15.0	3.9	10.3	3.0	9.8	3.2	9.1	3.2	10.8	2.9
Carbonated bevs.	14.9	10.8	10.2	7.5	12.7	9.3	6.2	4.2	10.1	7.1	11.8	8.2	10.9	7.8
Machinery	7.4	4.5	6.7	4.4	8.1	4.5	9.9	4.9	12.8	5.8	5.1	3.2	8.3	4.5
Motor vehicles	11.8	3.8	-	-	8.4	3.1	7.9	1.7	7.1	3.0	7.4	3.5	7.1	2.5
Motor Veh. parts, acc.	12.4	6.1	4.8	3.0	6.8	4.3	8.4	5.1	7.8	7.3	7.3	5.3	7.9	5.2
Pharmac. preps.	8.4	5.6	9.0	5.6	10.1	6.6	11.6	6.9	10.8	6.8	10.8	6.5	10.1	6.3
Soaps and toilet preps	9.4	4.8	6.7	3.5	8.3	4.6	8.4	4.7	7.6	4.1	9.8	5.2	8.3	4.5
Tobacco	10.3	8.8	10.7	9.3	11.2	9.2	10.5	7.5	8.8	6.5	7.2	4.6	9.8	8.2
Wire and wire prods.	9.3	7.0	8.8	7.3	9.4	7.3	10.3	7.5	9.7	7.7	8.0	6.7	9.2	7.2
All manufacturing	6.2	4.2	4.7	3.3	5.1	4.0	5.9	3.9	5.2	3.7	4.5	3.5	5.3	3.8

^a. Source: National Taxation Statistics, Department of National Revenue.



1
2 felt that the rate of profit in the industry is abnormal,
3 or undesirable. It is not felt that it is an indication
4 of monopoly extraction of profits.

5 FACTORS AFFECTING THE RATE OF PROFITS IN THE INDUSTRY

6 Position in the business cycle - The Pharmaceutical
7 Preparations industry has been in a definite upswing in
8 both its secular trend and in a cyclical upward swing
9 as well. This upswing has been generated particularly
10 by the development in the last few years of a number of
11 significant product areas, notably tranquilizers.

12 At the same time, manufacturing as a whole,
13 particularly in the last few years, has been much less
14 buoyant. While the rates of return for other industries
15 would appear to be turning upward, the pharmaceutical
16 industry rates have levelled off, and there are indications
17 that the industry is facing a period of some duration
18 when there is going to be considerable downward pressure
19 on rates of return, (See discussion in summary for some
20 elaboration on the factors which could lead to the
21 expected downturn.), unless some rather grand scale
22 product developments occur to push the industry into
23 another period of active acceleration (such as a cure
24 for cancer).

25 The divergences between these two cycles can
26 be seen in Table 3, where in 1953-54, the Pharmaceutical
27 Preparations industry was experiencing relatively low
28 rates of return in comparison with other industries.
29 After this point it began to climb while manufacturing
30 in general started to slow up. With the expected results



1 from the next period, and if separate data had been
2 available for the industry prior to 1953, the divergent
3 cyclical pattern could be expected to be even more
4 apparent.
5

6 Analysis of this factor, then indicates that
7 the present relative superiority of the rate of return
8 for the Pharmaceutical industry as compared to all
9 manufacturing is enhanced by a short-run lack of phase
10 between the cyclical patterns. Longer available data
11 for the industry, it appears reasonable to conclude,
12 would show less variation than indicated in the short
13 period data available.

14 Risk and obsolescence - The industry is characterized by
15 a fairly high degree of risk, in the sense that there is
16 a continual introduction of new products, which generally
17 operate to displace existing products. Since the rate
18 of introduction is essentially random (due to the
19 sporadic process of research development of new products)
20 there is a continual risk that a new product will be
21 cut out of the market by a better one before anything but
22 costs have been obtained from the market.

23 This leads to an indicated rate of product
24 obsolescence of a fairly high order. Yet, because the
25 industry is characterized by an orientation to a contin-
26 ual stream of new products, firms must continue to
27 bring new ones out or be prepared to lose ground
28 competitively. This compulsion to bring out new products,
29 with the attendant risk that the product will not pass
30 the test of the market (either because of inappropriateness



1 or competitive superiority), definitely gives the industry
2 a rating of a risk industry, (as compared, let us say, to
3 an industry which is producing a small number of relatively
4 stable products where the rate of product improvement
5 or development is low). A fairly high rate of profit is
6 to be expected under such conditions in order to induce
7 the firms to continue to invest in what is an uncertain
8 environment. This is not a condition peculiar to this
9 industry, or just to the manufacturing segment of our
10 society. High risk is expected to bring higher rewards,
11 to compensate for the taking of the risk. That such a
12 state of affairs is desirable appears to be eminently
13 reasonable, not just because the greater risk justifies
14 some extra compensation, but that it is the risk
15 activities which tend to provide the greatest stimulus
16 to growth and development. It would appear desirable
17 that such activities can expect a rate of profit higher
18 than less dynamic ones so that investment will be
19 channelled appropriately into activity conducive to
20 growth. If no particularly higher rate of return was
21 forthcoming on riskier activities it is not reasonable
22 to expect any great willingness to perform them.

23 Risk in the industry is indicated in several
24 ways. One is that the sales pattern of individual
25 products is extremely variable year to year, and in a
26 largely unpredictable fashion. Data on this can only
27 be obtained from individual company examination, and is
28 not appropriate to this analysis in any detail.

29 However, the obsolescence experience of one
30



1 particular firm over a 10 year period gives some
2 indication of the unpredictability (and hence risk)
3 involved in the introduction of new products. The
4 survey indicated that products which made up 60% of the
5 items in the regular line, and contributed 45% of the
6 sales volume, ceased to exist on the market at the end
7 of the 10 year period. Such a rate of obsolescence adds
8 substantially to the risk factor, and is a sharp example
9 of the continued necessity for new product development
10 and introduction if a firm is not to lose ground
11 severely in the market.

12 The other statistically observable indication
13 of risk in the industry is found in examination of the
14 proportions of loss companies to total companies in
15 this industry, both in the absolute, and in comparison
16 to all manufacturing, and some other selected industries.
17 Such an examination (See Table 4. for details of loss
18 proportions) indicates that the proportion of loss
19 companies has over the period 1953-58 been about com-
20 parable to that of all manufacturing, 27.2% or 27.6%,
21 and generally higher than in industries with comparable
22 rates of return on profit. This data supports the
23 qualitative observation that the firms in the industry
24 run risks by either bringing out products at a rate
25 sufficient to assure good profits (the reward for
26 successful risk taking) or lose out if the process is
27 not successful (the price of failure to successfully
28 introduce and maintain products). It would seem that it
29 is not easy in the industry to muddle along comfortably.
30

TABLE 4.

Loss Companies as a percentage of total companies in Selected Industries and for all manufacturing. ^a

Year	1953	1954	1955	1956	1957	1958	Average
Industry							
Alcoholic Bevs.	9.5	16.1	8.6	13.9	5.2	0.0	8.9
Aircraft + Parts	20.0	24.3	27.1	5.9	6.0	37.5	20.2
Carbonated Bevs.	24.2	25.3	23.7	35.8	34.5	16.7	26.7
Machinery	27.3	31.8	26.4	22.1	23.1	37.6	28.0
Motor Vehicles	11.1	27.3	16.6	8.5	37.5	0.0	16.8
Motor Vehicles P + A	15.0	19.6	13.8	17.5	19.6	31.7	19.5
Pharmaceutical Preps.	28.6	27.5	26.0	18.3	30.6	32.2	27.2
Soaps + Toilet Preps.	29.7	26.2	20.1	33.3	14.6	25.9	24.9
Tobacco	19.3	25.0	21.7	24.0	19.2	24.0	22.2
Wire + Wire Prods.	18.2	16.6	17.2	21.2	21.8	18.0	18.8
All Manufacturing	27.5	31.9	26.9	24.3	26.7	28.2	27.6

a. Data from Taxation Statistics, Department of National Revenue.



1 A firm appears to be faced with the alternative of
2 aggressively developing and promoting its products, and
3 enjoying financial success as a result, or being decidedly
4 unsuccessful. Individual observation of firms in the
5 industry bear this out, and details available as a
6 result of hearings in the U.S. also substantiate this.
7 All this is characteristic of a risk industry, and in
8 such an industry one expects and it requires a rate of
9 return higher than the average for all manufacturing,
10 composed as it is of industries ranging all the way from
11 extremely high risk to virtually riskless.

12
13 As a final comment on the degree of risk in
14 the industry, it will be observed from Table 4. that
15 the percentage of loss companies has been steadily
16 increasing after reaching a low point in 1955-56, by
17 1958 having reached a point where it is observably higher
18 than the average for all manufacturing. This ties in
19 with the indications that the industry appears to be
20 approaching the end of its particular upswing and is
21 likely to face a period of increased downward pressure
22 on profits. This increase in loss companies coincides
23 with the levelling off in rates of return indicated in
24 Table 3.

25 Research - The most obvious manifestation of the risks
26 in the industry, and at the same time the competitive
27 pressure existing in the industry, can be observed in
28 the heavy research orientation of the pharmaceutical
29 manufacturing industry. It is not my intent to delve
30 into arguments pro and con as to the specific social



1
2 merits of the fruits of this research. From my frame
3 of reference, this activity is only pertinent in that
4 (1) it is an aspect of the competitive activity which
5 exists in the industry (2) it is an example of the risk
6 and obsolescence characteristics of the industry, and
7 (3) that the research activity in the industry does
8 cause a continual stream of product development and
9 change of a relatively high order. In purely economic
10 terms, one feels this is desirable. It does not seem
11 valid for any individual or group to make the extensive
12 value judgements necessary to say what social contribu-
13 tion new products and improvements have. Without making
14 such a subjective evaluation, all that can be said is
15 that a high stream of product improvement will be more
16 desirable than a low stream in terms of improving the
17 material welfare of society. Product development and
18 improvement, indeed, provide one of the most significant
19 vehicles of competitive activity between firms in the
20 economic system as it is now structured, and in terms of
21 material gains in goods and services, one of competition's
22 most obvious benefits.

23 The research activity which is performed in
24 the industry is at the heart of the successful competitive
25 efforts of the firms in the industry. A continual stream
26 of new product ideas, as indicated earlier, is necessary
27 in order that the firms at least stay abreast of their
28 competitors. It is perhaps not too much to say that the
29 firm which does not perform adequate and effective
30 research does not stand much of a chance. This would



1
2 appear to be becoming even more significant in the
3 future for the industry. (Clear expression of this can
4 be seen in an article in Fortune, May, 1960 by Charles
5 E. Silberman - "Drugs: The Pace is Getting Furious" page
6 138.) Because of the nature of the product (prescription
7 drugs) is not actively sought by the consumer and whose
8 variation in demand for the product is predicated by
9 illness rather than by the normal price-satisfaction
10 evaluation of most consumer products, there is a
11 premium on competitive effort which produces new and
12 better drugs. The consumer, and his agent in the
13 purchase of drugs, the medical practitioner, are
14 motivated more by concern over the absolute efficiency
15 of the drug, than by its relative price. In other words,
16 competitive activity which is primarily directed at
17 lowering costs of existing products does not lead to
18 market success as effectively as producing a better
19 product. The consumer puts a premium on activity which
20 enhances his prospects of better medication, rather
21 than putting primary pressure on static efficiency.
22 As a result, research activity and the ensuing development
23 and introduction of new products is the primary
24 competitive orientation of the industry, rather than the
25 primary competitive pressure being exerted in other
26 ways.

27 The necessity of directing a large measure of
28 competitive activity in this way sets the stage for the
29 risk and uncertainty of the industry.

30 This is primarily for the following reasons:



1
2 (1) the timing of new product improvements is largely
3 unpredicatable.

4 (2) the anticipation of competitor action is even more
5 unpredictable. This intensifies the pressure towards
6 product development, and active promotion of a new
7 product when it is introduced, since the risk of
8 competitive eclipse is always present.

9 (3) The degree of product success is hard to estimate,
10 aside from competitor action, since the merchandisable
11 qualities of a new product are hard to evaluate until
12 well along in the development cycle, if not in actual
13 market use.

14 These factors are intensified by two aspects
15 of the research process. The time cycle from new
16 compound synthesis to market introduction is long, thus
17 the possibility is continually present that a firm might
18 be precluded from the market by a competitor's product
19 after being involved in the development of a product
20 for some time. This time cycle is a little difficult
21 to estimate, but a reasonable statement would appear to
22 be that it is of the order of 3-5 years. In addition
23 the percentage of compounds synthesized in the research
24 program which becomes marketable is very small. No
25 industry figures are available on this, but one firm in
26 the industry has the experience of somewhat less than
27 1% of its compounds reaching marketable stage.

28 These two aspects of the research and development
29 process intensify the risks in the industry and at the
30 same time put a premium on the aggressive striving for



1
2 new products, both as a means of competitive superiority,
3 and competitive survival. It would seem that the firms
4 in the industry would find their best competitive strategy
5 in emphasizing their research and development activities
6 vis-a-vis other competitive activities, coupled with as
7 effective a program as possible of product introduction
8 and market promotion.

9 The position of research activity as indicated
10 above contributes to the explanation of the rate of
11 profit in the industry. On the one hand, the risks and
12 costs of the kind of program required necessitate a good
13 level of profits to provide the continued flow of capital
14 required. On the other hand, if the firms in the industry
15 do invest in research, both in terms of expenditures,
16 and in terms of new facilities, as they have been, it is
17 to be expected that the industry would grow at a fairly
18 rapid rate, and that the rate of return during this
19 growth period would be good, as it has. In the next
20 section, some specific indications of the rate of growth
21 will be given, which indicate that the competitive
22 strategy of the industry, aside from contributing to a
23 good rate of return, has produced a flow of products
24 which have found a ready market acceptance.

25 GROWTH OF THE INDUSTRY

26 During the period 1949-58 the industry has
27 experienced a substantial degree of growth. In
28 qualitative terms, there has been a substantial change
29 in categories of drugs manufactured; the substantial
30 development of antibiotics, the antihistamines, and the



1 tranquilizers has caused a definite shift in the character
2 of pharmaceuticals consumed by the public, and a change
3 in the cure and treatment of numbers of illnesses.
4

5 In quantitative terms, factory sales in the
6 medicinal and pharmaceutical industry (Data from
7 Pharmaceutical Industry Annual) have increased from
8 \$71,502,135 in 1949 to \$155,006,181 in 1958, an increase
9 of 119%. Extracting sales of medicinals, pharmaceuticals
10 and biologicals from this total, the comparable figures
11 are \$49,873,276 to \$110,382,180, 1958, and increase of
12 147%. The consistency between these two reinforces the
13 opinion that figures for the industry grouping provide
14 a reliable indicator for the activities of medicinals,
15 pharmaceuticals and biologicals. In the same period,
16 factory employment moved from 7,658 to 7,996, an increase
17 of 4.4%, Salaries and Wages from \$16,116,592 to \$29,847,315,
18 an increase of 85.1% and value added by manufacturing
19 going from \$48,008,393 to \$111,162,375, up to 131.6%.
20 These figures indicate that the wage payments per worker
21 have risen more rapidly than for the manufacturing
22 group as a whole, with employment increases being some-
23 what behind; the relevant figures for all manufacturing
24 being an increase in the indexes of 9.8% for employment,
25 and 82.7% for salaries and wages. The relatively higher
26 salary bill in proportion to numbers is explained by the
27 high proportion of skilled personnel involved in the
28 industry on capital investment for growth, as indicated
29 by examining the expenditures of new plant and equipment.
30 From 1950 to 1958, the annual expenditure has risen



1 from \$1,383,000 to \$7,689,000 with a substantial increase
2 in expenditure in the period 1955-58. Indications are
3 that this rate of expenditure will continue, and probably
4 increase. (See Table 5. for detailed figures on expen-
5 diture for new equipment.)
6

7 When one considers the industry profit as
8 indicated in the Taxation Statistics for 1958 of
9 \$12,000,000, this rate of expenditure can be seen to be
10 substantial relatively as well as in absolute terms.
11 Such a rate of capital investment helps both to explain
12 the good rate of return in the industry, and point to
13 its usefulness in providing the inducement for this
14 continued investment.

15 The growth in sales has been particularly
16 pronounced in the newer product areas as indicated by
17 the sales breakdown in the Pharmaceutical Industry
18 Annual reports. From 1952 to 1958, sales of penicillin
19 preparations increased (See Table 6. for detailed figures
20 on factory sales for the industry, and for product groups)
21 from \$3,169,057, to \$3,485,102, while sales of Other
22 Antibiotics, whose sales were not classified separately
23 because of relatively low volume prior to 1952, increased
24 in this period from \$4,371,364 to \$13,023,490. This
25 gives some quantitative indication of the growth process
26 in the industry deriving its main power from the
27 competitive introduction of new products and improvements,
28 rather than in increasing sales of earlier medications.
29 This growth in sales is the more significant when one
30 looks at the performance of prices in the industry in the



1
2 period. This performance, as discussed in the next
3 section, indicates that the sales increase was substan-
4 tially one of physical increase in product sales rather
5 than in price increases. In other words, an increased
6 use of the products of the industry, rather than higher
7 payments for essentially the same amounts.

8 PRICES

9 As indicated in the last section, the prices
10 of drugs have not risen in such a way as to wipe out
11 the increased dollar sales of the industry. During the
12 period 1949-58 when industry sales reached at the end
13 of the period about 220% of volume at the beginning,
14 the index of retail drug prices only went to 118.2.
15 (Price index data from Price and Price Indexes, Dom.
16 Bureau of Statistics.) No separate index of wholesale
17 or manufacturer prices is available in Canada but in the
18 U.S. the wholesale price index for drugs has lagged
19 far behind the retail drug prices, which have performed
20 similarly to those in Canada. In the U.S. Wholesale
21 prices have actually declined during the period. A
22 comparison of the extent of competition and the industry
23 structure would lead one to expect the same kind of
24 performance from the Canadian Industry, particularly
25 since the movement of retail prices was virtually the
26 same. This decline in the U.S. compared with an all
27 commodities increase of over 18%.

28 In comparing the retail prices of drugs with
29 the general consumer price index, for 1959, the last
30 complete year available, the CPI stood at 126.5, while

TABLE 5.

Medicinal and Pharmaceutical Preparations Industry, Expenditures
on New Plant and Equipment. ^a

Year	Expenditure (\$)
1950	1,383,000
1951	2,792,000
1952	2,263,000
1953	2,291,000
1954	4,841,000
1955	5,905,000
1956	8,456,000
1957	6,839,000
1958	7,689,000

a. Source, Pharmaceutical Industry Annual Reports.

TABLE 6.

Factory Sales Information, Medicinal and Pharmaceutical Preparations

Industry ^a.

Year	Industry Sales	Sales of Pharms. and Biol.	Penicillin Preps.	Other Antibiotics
1949	71,502,135	49,873,276	3,635,645	-
1950	76,372,691	50,506,663	4,207,959	-
1951	89,248,867	66,776,813	4,435,545	-
1952	88,022,387	61,932,671	3,169,057	4,371,364
1953	93,557,168	66,304,661	2,919,078	5,180,935
1954	97,395,558	70,246,027	2,368,945	7,070,409
1955	108,121,734	77,227,920	2,251,097	8,225,151
1956	122,592,220	85,594,400	2,956,332	8,593,430
1957	140,092,919	99,428,932	3,436,242	11,353,601
1958	155,006,181	110,382,180	3,485,102	13,023,490

^a. Source, Pharmaceutical Industry Annual Reports.



1
2 the retail drug index was at 124.1. So in addition to
3 not accounting for much of the increase in sales volume,
4 the price increase indicated for drugs has been rela-
5 tively favorable in terms of increases in consumer
6 prices in general.

7 In view of the dissimilarity between drugs and some
8 other consumer products, particularly in terms of the
9 changes in medical activity having taken place, it is
10 somewhat useful to compare the behaviour of drug prices
11 with other components of health care. In 1959, when the
12 index of retail drug prices stood at 124.1, the index
13 for hospital rates was at 204.7, for Physician's
14 fees, at 141.7, for prepaid health care plans at 168.5,
15 and the overall index for Health care stood at 154.5.

16 In comparison with the other components, then, it cannot
17 be said that price increases in drugs have been a major
18 contributor in the increased costs of health care
19 services. The contribution of drugs to this increase
20 has been in the increased physical use of drugs. To the
21 extent that drugs tend to be a substitute for other
22 medical activity, such as hospital stay, it would seem
23 that this increase in physical use has exerted a downward
24 rather than upward pressure on the total costs of health
25 care.

26 In addition, when it is considered that there
27 has been a continual process of improvement in product
28 and introduction of more effective products during this
29 period, the price increase which is in evidence would
30 appear to overstate the case since the product is more



1 product, in the sense of being an improved one. The
2 degree of such improvement is difficult if not impossible
3 to measure precisely, because of the necessity for
4 subjective evaluation of the improved performance involved,
5 but it would appear to have been substantial.

6 Both the price increase and the increase in
7 physical volume are only completely relevant when compared
8 to the increase in wages during the period, and the
9 share which this expenditure takes of the consumer's
10 total expenditures. As far as wages are concerned, in
11 the same period that the drug index was climbing to
12 124.1, the index of weekly wages in manufacturing was
13 climbing to 168.1. The effect on total consumer
14 expenditures is a little more difficult to estimate but
15 two fairly recent studies by the DBS on City Family
16 expenditures, in 1953 and 1955, indicate that (1)
17 expenditures on drugs are a relatively minor part of
18 average family expenditures, and (2) at least over the
19 period of the two studies, remained a stable part of
20 total consumer expenditures. In view of the expansion
21 in this period in sales of drugs, it would appear that
22 the pattern of expenditure indicated for that period can
23 reasonably be taken as indicative of present experience.

24 Specifically, the studies indicated that all
25 drugs accounted for 0.74% of total family expenditures
26 on the average in 1953, and 0.78% in 1955, with
27 prescription drugs accounting for 0.51% and 0.53%
28 respectively. This compares to percentages for the two
29 years of 1.29 and 1.30 for physicians and prepaid
30



1 physicians expenditures, 0.83 and 0.81 for hospital
2 and prepaid hospital expenditures. As a precentage of
3 total medical expense, total drug expenditures remained
4 essentially constant at 17.2% and 17.9% in 1953 and 1955
5 respectively, with prescription drugs also remaining
6 stable at 11.7% and 12.1% respectively. As is indicated
7 in Table 7, these expenditures for drugs are relatively
8 minor in comparison to expenditures on what could be
9 classed by comparison as luxury or non-essential items.
10

11 Neither the price index results nor the
12 information on City Family Expenditures seem to bear out
13 the presently prevalent allegation that drugs are at the
14 heart of the high cost of medical care, in any sense
15 of their average influence on the population. What
16 appears to be the case is that specific individuals,
17 particularly those on restricted incomes are often
18 faced with substantial bills for medical care and drugs.
19 In view of the reasonable performance as indicated above
20 of drug prices and average expenditures it appears that
21 this problem is one of too little income in certain
22 segments of the population rather than too high charges
23 for drugs for the population as a whole.
24
25
26
27
28
29
30

TABLE 7.

Details on Surveys of City Family Expenditures (DBS) for 1953 and
1955 (in Dollars)

Item	1953	1955
Medical Care	188.2	193.6
Selected items of medical care		
Prepaid Plans (total)	50.1	48.7
medical only	11.5	15.2
hospital only	19.8	17.9
Physicians	45.0	42.7
Hospital Care	16.6	18.1
Drugs		
prescription	22.1	23.6
non-presc.	10.2	11.2
Recreation	157.5	177.6
Movies	27.6	18.3
T.V. and Radio repairs and purchases	68.8	97.2
Smoking	93.3	104.1
Alcoholic Bevs.	60.6	68.2
Reading	31.0	30.6
Newspapers	20.0	19.1
Average Expenses per family	4,360	4,424



1
2 PRICING AND PROMOTIONAL STRATEGIES

3 As indicated in the discussion above, the
4 industry competitive pattern is heavily directed towards
5 product development and introduction as probably the
6 most effective means of competitive success. This is
7 influenced strongly by some characteristics of prices and
8 the pricing process in the industry, and by factors
9 influencing the need for promotional activity.

10 As far as pricing is concerned, it has been
11 noted that the consumer reaction to the product is more
12 concerned with improvements than with cost savings per
13 se. The main pressure for price reductions comes from
14 competitive development of similar products or from
15 improved production techniques which enable the competitors
16 to reduce the price in an attempt to take over more of
17 the market from the introducer of a particular product.
18 These circumstances tend to create a pricing pattern
19 which is somewhat dissimilar to other industries, at
20 least superficially. The initial stages are the same.
21 A given price to start, set as far as can be ascertained
22 on the basis of an estimate by the introducing firm of
23 the substitutes and their prices and the demand pressures
24 which exist. After a period of initial pricing, the
25 introduction or improvement of competing products
26 reduces the price to a second level, where it quite
27 often stays, rather than continuing to reduce, unless
28 the item becomes a staple drug. The more typical pattern
29 seems to be that the drug is displaced by a product
30 which is significantly better in performance. At this



1 point the conventional techniques in other industries
2 of sharp price reductions have no particular effect.
3 The consumer is not interested in the inferior product
4 at any price, except in fringes of the market. Thus
5 there is no point or purpose in the manufacturer reducing
6 price at this stage, no increase in sales can be expected
7 as a result. Thus price rigidity sets in at this point,
8 which is not however the result of monopolistic or
9 collusive activity to "hold up" the consumer, rather it
10 is because of consumer indifference to the product at
11 all because of superior substitutes. The manufacturer
12 can hold his price here as long as he wants, but as long
13 as his competitors continue to produce innovations, he
14 will sell very little of his product. His only
15 competitive solution is to develop and introduce
16 innovations himself.

17
18 It will be observed that particularly in the
19 early stages there is little if any relation between
20 costs and the price set. This is reasonable under any
21 marketing circumstances in that the price should be
22 demand-oriented rather than cost-oriented, but particu-
23 larly in the case of the pharmaceutical industry in
24 common with some others, the presence of a preponderance
25 of joint costs which are inseparable as far as individual
26 products are concerned makes any attempt at individual
27 product cost pricing pointless and purely arbitrary.
28 Any attempt to either justify or criticise individual
29 prices on a cost basis under such circumstances is
30 pointless, and invalid. The only course open for the firm,



1
2 and the only test as to the overall pricing policies, is
3 to examine the pricing of the full line. That is, as
4 far as the firm is concerned, is the total rate of
5 return on the company's line of products satisfactory.
6 If not, either what prices can be adjusted so that it
7 will be, or more typically what production or new product
8 innovations can be achieved which will improve the
9 profit picture. This decision must always be at the
10 level of the firm; full-line pricing. From the point of
11 criticism the only valid reference points are whether
12 or not the behavior of drug prices is out of line with
13 other prices and with expected behaviour, and basically,
14 this can only be checked in any final sense by an
15 evaluation of whether or not the industry is competitive.
16 If it is the prices which result can be expected to be
17 reasonable. As indicated in the above analysis, it
18 would appear that the industry does exhibit a satisfactory
19 level of competitiveness, both in an absolute sense,
20 and perhaps even more so in relation to the average of
21 industrial groupings.

22 Since it is new product introduction rather
23 than direct pricing activity that is the effective
24 weapon of competition in the industry, this then puts a
25 premium on that activity which has perhaps received the
26 most criticism: promotional activity. If the success
27 of the firm competitively depends on the continued
28 successful introduction of new products and improvements,
29 then there is a premium on getting to the market
30 quickly and effectively with information and selling



1 effort concerning the new product. The need for quick
2 and effective communication of promotional activity is
3 intensified by several factors.

4 (1) Due to the uncertainty of competitive introduction
5 of products which could radically displace one's own
6 product, there is an urgent need to get your product
7 into the market as quickly and effectively as possible
8 so that no time is lost in making sales, since the
9 duration of successful sales of the product is
10 uncertain.

11 (2) The nature of the distribution of drug products,
12 particularly for national firms, also pressures towards
13 a heavy promotional activity. The nature of the demand
14 for drugs is that they must be available relatively
15 instantly in all possible outlets, and at about the same
16 time, both because of the desire for all areas to have
17 new products available when everyone else does,
18 particularly if it is an advance in health care, and
19 also because of the necessity of continued treatment of
20 a mobile population. This means that the products of
21 the industry must be distributed with maximum intensity
22 and also on a completely extensive basis, this
23 distribution being accomplished more or less simultaneously
24 in all areas. In order to do this, a high degree of
25 promotional activity, on a number of fronts, makes
26 sense. Thus the industry launches a new product with
27 direct mail, journal advertising, and the activities of
28 detail men, all dovetailed so as to get the maximum
29 impact of the promotional message so that there is a
30



1
2 possibility of rapid and widespread acceptance of the
3 product.

4 (3) The fact, perhaps unpleasant in some quarters,
5 that partly because of the immense volume of information
6 and new developments, and partly by a host of other
7 factors, the promotional material supplied by the
8 pharmaceutical firms is the major source of new product
9 information for the agent for the consumer in the
10 purchase of drugs, the physician. It seems clear from
11 numerous studies in the U.S. and elsewhere that at
12 least 60-70% of the product information of the physicians
13 is supplied from this source, and more to the point has
14 to be, since there are no other effective sources of
15 any consequence. As a result, the individual drug firms
16 find that this suspension of promotional activity results
17 merely in a reduction of sales, or a drastic slowing
18 down in the rate of market acceptance of their product.
19 Such results spell loss to the companies, and the only
20 reasonable behavior on their part is to continue to
21 promote in the most effective way possible, which at
22 the moment is clearly the use of a wide variety of
23 materials and contacts.

24 In addition to the obvious function of information,
25 the perhaps more significant, or at least as significant
26 contribution of the activity is that it provides the
27 vehicle by which the firms can hope to effectively
28 capitalize on the innovations. Without this, the
29 possibility of financial success from the introduction
30 of a new or improved product is reduced substantially,



1
2 if not eliminated in some cases. Thus if such activity
3 were not possible, it is not reasonable to expect that
4 the present rate of innovational activity in the industry
5 would continue. If the possibility of success is
6 reduced, the desire to try will be reduced also. As
7 with other segments of the economy, it is to be expected
8 that the firms in the industry anticipate economic gain
9 from their activities, and if this possibility is sharply
10 curtailed then the stream of product development is
11 bound to reduce. The main thing for the society is to
12 be sure that this activity is carried on in an environment
13 which is competitive rather than monopolistic or
14 collusive, and the competitive environment clearly would
15 seem to be the case.

16 As an aspect of the promotional activity,
17 branding is an apparent factor. Branding is the attempt
18 of the firm to capitalize on its reputation and its
19 selling activity so as to obtain repeat sales and a
20 better chance of maintaining a share of the market.
21 Conversely, it also carries with it the danger that since
22 the firm is identifying its products clearly, any faulty
23 or subpar behavior will rebound to the disadvantage of
24 the firm. In an industry subject to considerable
25 competitive pressure, as the pharmaceutical industry
26 would appear to be, the main contribution of branding
27 would appear to be putting of pressure on the
28 manufacturer to continually maintain and improve the
29 quality and performance of his product. The failure to
30 do so would directly affect his sales in view of the



1
2 identification of the brand and the relatively better
3 actions of his competitors. In addition, since a
4 sound program of good product development and promotion
5 will definitely enhance the manufacturer's effort to sell
6 successfully in the market, the existence of a possibility
7 of branding which will at least enable the manufacturer
8 to start on a favorable base in the market is an added
9 inducement for him to try and develop and introduce new
10 products. Branding in effect, is not a unique factor,
11 but merely a particular manifestation of the total
12 promotional activity of the firm which is geared to
13 improving the possibility for success in the market. It
14 is not felt that in a competitive industry, the act of
15 branding delivers any general degree of monopoly control
16 to particular branders, since continued good performance
17 is necessary for acceptance, and since competitors are in
18 a continual process of bringing out new products which
19 are designed as effective if not superior substitutes of
20 a particular brand. This is not to say that the
21 possibility of temporary monopolies are not enhanced by
22 the existence of branding, but (1) this is likely to
23 be very temporary, and (2) would seem to be a small
24 price to pay in view of its role in encouraging a
25 continual pressure and inducement for product improvement
26 and new product introduction. These temporary monopolies,
27 or perhaps points of stickiness in the competitive process
28 are the sorts of things which Schumpeter, in his
29 Capitalism, Socialism, and Democracy, compared to the
30 brakes on a car which are necessary in order that one



1
2 can go quickly in the car. Without brakes one would not
3 dare to move. Without the possibility or perhaps better,
4 hope (since it is quite often unrealized) of temporary
5 superior profit returns, the motivation for continuing
6 to develop and introduce new products, with its
7 attendant improvement in the growth rate of the economy,
8 would be sharply curtailed.

9 CROSS LICENSING OF PATENTS

10 In concluding this analysis, there is one area
11 and its influence on ompetition which would seem to
12 require some special comment. That is the existence of
13 regulations in Canada requiring the cross licensing of
14 any patents obtained by particular firms in the industry.
15 The argument here as to the impact of such regulations is
16 essentially the same as the argument regarding branding.
17 Superficially, it would appear that the forced sharing
18 of patents is a good device to ensure that no firm is
19 allowed to obtain a superior competitive advantage over
20 another which could lead to exercise of monopoly power,
21 and it would appear that this was the motivation for the
22 enactment of the regulation in the first place. However,
23 there would seem to be considerable doubt as to the net
24 effect of the regulation as far as the stimulation of an
25 active rate of competitive activity and the degree of
26 competitiveness in the long run. There is at least some
27 ground for saying that the possibility of cross licensing
28 reduces the pressure on all firms to develop new products.
29 On the part of the normally aggressive firms, this reduces
30 the competitive advantage to be gained from such



1
2 development, and on the part of the more passive firms,
3 it removes the competitive fear of being left behind. If
4 no cross licensing were in effect, then all firms would
5 have to be certain that they continued to develop comp-
6 etitive new products so that they would not be left
7 behind. In this way one feels that the level of competitive
8 activity, and certainly the rate of new product
9 development, improvement and introduction would be
10 accelerated.

11 This would appear to be the only area where
12 some question really exists, and admittedly there are
13 arguments on both sides. The fact that the industry
14 itself is split on the issue is a measure of the uncer-
15 tainty of its competitive effect.

16 However, even if, as the above argument indicates
17 this tends to be a damper on competitive activity, at
18 least as far as the new product area is concerned, its
19 effect is reduced in that there are a substantial
20 proportion of the industry products for which patents
21 are either not obtainable or not sought. The volume of
22 these and their influence in the total sales figure is
23 such that there still exists as a result of them a
24 continual pressure to product development. One is
25 merely suggesting that this already fairly high level of
26 activity might be enhanced rather than reduced by the
27 removal of compulsory cross licensing, and presumably the
28 enhancement of competitive pressure is a desirable event
29 to induce, certainly for the society as a whole, and also
30 for the aggressive firms at least in the industry, who



1
2 can expect to hold their own and benefit by the expansion
3 of the industry which is likely as a result of any
4 enhancement of the level of competitive pressure,
5 particularly as it evidences itself in the development of
6 new products.

7 SUMMARY

8 The summary will bring together some general
9 conclusions on what appear to be the more important
10 economic aspects of the Pharmaceutical manufacturing
11 industry. These would appear to be (1) the state of
12 competition in the industry (2) General growth and
13 prospects for the industry (3) profits in the industry,
14 and their impact on prices.

15 STATE OF COMPETITION

16 It would appear that it can be said fairly that
17 the industry is a competitive one. As was indicated
18 specifically in the analysis, the number of firms, the
19 degree of concentration, the evidences of specific
20 competitive activity, notably in the area of product
21 development and promotion, the behavior of drug prices,
22 all would seem to clearly indicate that a satisfactory
23 level of competitive activity exists in the industry.
24 It would appear further that this competitive activity is
25 generally directed in a manner which is socially desirable.
26 Growth, product improvement and development, and the
27 general level of prices in the industry definitely appear
28 to have been favorable, rather than unfavorable, to the
29 consumer. One possible reservation, which is not felt to
30 be strong enough to modify this conclusion to any degree,



1
2 is that these activities might be stimulated more with
3 elimination of cross licensing. The level of promotional
4 expenditures is of a fairly high order, but both the
5 competitive structure of the industry, and more important,
6 the nature of the market for drugs, and the environment in
7 which information on new products is disseminated makes
8 these expenditures logical, and does not indicate a
9 distortion of resources on the part of the pharmaceutical
10 manufacturing industry itself. In addition to the
11 environmental logic of the promotional effort, it is part
12 of a competitive structure which creates a favorable
13 condition for a high rate of product competitive activity
14 and new product introduction.

15 PROFITS IN THE INDUSTRY

16 Profits in the industry have been seen to be
17 good, but not unwarranted in view of the growth of the
18 industry, nor in terms of the level of incentive reasonable
19 to induce the continued high rate of capital and sales
20 growth which has been characteristic of the industry. In
21 addition, the rate of profit to which these comments
22 apply, would seem to be higher than one might expect in
23 the future, both because of indications of more difficult
24 competitive pressures and higher costs (as will be
25 indicated in the next section), and also because the
26 period under analysis was a period of growth and upswing
27 for the industry, under the impetus of the development of
28 new drugs, and their wider application in medical treatment,
29 as contrasted with a general stickiness of a considerable
30 part of the period as far as the manufacturing sector of



1 the economy as a whole was concerned.

2
3 Since there is concern with the level of drug
4 prices, some comments on the level of profits and the
5 prices would appear to be in order. As has been indicated,
6 the price behavior of the products in the industry appears
7 to have been very moderate, and prices in the industry have
8 lagged behind many other general consumer components,
9 and more particularly, have lagged substantially behind
10 other components in the cost of medical care. Even if
11 one felt that the level of profits was unreasonable, and
12 as it has been argued, it is not felt that they were,
13 the spread between the actual level of profits, and some
14 lower figure, such as the average for all manufacturing,
15 would not in and of itself produce much of significance
16 towards a reduction of prices. Assuming an industry
17 markup from manufacturer to consumer price of about 40%
18 on retail, and assuming a drop in profit as a percentage
19 of the sales dollar from the average actual performance
20 of 6.3% to the all manufacturing average of 3.8%, this
21 change would result on each dollar of retail selling
22 price in a reduction of 1.5% at the retail level, even
23 provided that everything else remained equal. However,
24 it is doubtful that everything would remain equal, and
25 there is every possibility that this potential decrease,
26 small as it is might not be realized, and further, that
27 certain negative effects could result. The reduced
28 incentive which is reasonable to expect could well result
29 in a lowering of the rate of growth of the industry, and
30 would certainly have an adverse effect on the willingness,



1 and hence the rate of product improvement and introduction.
2 Particularly since the industry is faced with, and has
3 been facing for some time now the prospect of more
4 difficulty in bringing competitive improvements to the
5 market, such a dampening effect would hardly seem
6 warranted. When one takes into account both the circum-
7 stances that the rate of profit in the industry is one
8 induced by growth and vigorous product promotion and
9 introduction, rather than by a weak state of competition
10 in the industry, and add the stimulating effect that this
11 rate can be presumed to have on the rate of growth and
12 development in the industry the price of the far from
13 certain price reduction from the lowering of profits
14 would appear to have been a small one to pay for the
15 progress in the industry in the past period. This is
16 particularly so when the decrease might well be illusory,
17 either because the small amount could easily be lost in
18 the process of moving the goods at retail to the consumer,
19 and because of the definitely possible contraction in
20 the market as a result of a slowed up rate of product
21 introduction and promotion. This is particularly evident
22 in view of the price activity that does take place.
23 Although the main competitive emphasis is on promotion
24 and product development, competitive price reductions
25 are used by the firms as a regular activity. This activity
26 plus the continual pressure on production techniques,
27 appear to have been the main forces operating to keep
28 the general level of prices in the industry at their
29 relatively low level.
30



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2 GROWTH AND PROSPECTS FOR THE INDUSTRY

3 It would appear reasonable to expect a
4 continued growth in the industry and a continued flow of
5 new products to the market. The success of the industry
6 in developing and successfully introducing significant
7 breakthroughs would seem to be the main key to the rate
8 of this growth and also to the performance of profits
9 in the industry. Some analysis of the developmental
10 process and the plane of developmental difficulty into
11 which the industry is moving would seem to indicate that
12 in order for firms to grow profitably, substantial
13 increases in the pace of and expenditure on research and
14 development should be anticipated. Also, because the
15 areas of illness to which the industry must turn in the
16 supplying of new drugs would appear to be more difficult
17 of solution, the speed of new developments and the
18 certainty of their introduction are reduced. This indicates
19 that the firms in the industry must be prepared to in
20 effect gamble at longer odds with their investment and
21 run the risk of more variable possibilities of success
22 than already in evidence. It would appear that firms
23 which already are extensively involved in research and
24 development stand a better chance of successfully passing
25 through this period, and those firms not now thus engaged
26 can, I feel, expect to find themselves in difficulty in
27 the competitive struggle for markets unless such
28 activity is expanded on their part.

29 THE CHAIRMAN: This being 4.15 in the afternoon,
30 and this having been a fairly heavy day of reading,



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I suggest we adjourn until 10.15 in the morning.

--- Adjournment.

K. Bryden

Select Committee on Drugs

HEARINGS

HELD AT
PARLIAMENT BUILDINGS
TORONTO ONTARIO

VOLUME No.:

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3 SELECT COMMITTEE ON DRUGS
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6 Proceedings of hearings
7 held at Parliament Buildings,
8 Toronto, Ontario, on Tuesday,
9 the 25th of October, 1960, at
10 10.00 a.m.

11 COMMITTEE:

12 MR. H. L. ROWNTREE, Q.C. Chairman
13
14

15 MR. A. WREN

16 MR. J. A. FULLERTON

17 MR. J. TROTTER

18 MR. R. E. SUTTON

19 MR. R. J. FOYER

20 MR. N. WHITNEY

21 MR. H. J. PRICE

22 MR. K. BRYDEN

23 MR. J. WHITE

24 MR. G. F. LAVERGNE
25
26

27 MR. S. J. GADSBY, F.C.I.S., Secretary

28 MR. HAROLD A. RICE, Committee Counsel.
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--- Hearing resumed at 10.30 a.m.

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THE CHAIRMAN: Yesterday we had the main brief of the Canadian Pharmaceutical Manufacturers Association read in by Mr. Conder, and we also had an economic analysis of the pharmaceutical industry, the manufacturing industry, prepared by and read in by Professor Brian Dixon of Kingston.

10

Now, there was no examination on the brief. Have you any questions you wish to ask, Mr. Rice?

12

MR. RICE: Yes, Mr. Chairman. Mr. Conder, in presenting the brief of the Association, I note that throughout the brief and also throughout the economic analysis of Dr. Dixon, reference has been made to Canadian figures and Canadian statistics.

17

The Committee here is interested in Ontario figures and statistics. Is there any way that Ontario figures and statistics could be established for these surveys?

21

MR. CONDER: That would be very difficult to do, Mr. Rice, because we represent a national organization. When we did our surveys in this respect, we took it from all companies as a whole. I would presume we could get similar information from our Ontario companies, but by the very nature of our operation we did take this on the national basis because we felt what would be an average for all companies might conceivably give this Committee an idea

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1
2 of the factors involved in our operations.

3 THE CHAIRMAN: Do you suggest your
4 Ontario companies are the only ones that sell in
5 Ontario?

6 MR. CONDER: No, sir, they are not. All
7 companies -- I wouldn't say all companies, but the
8 majority of them would sell in Ontario as well as other
9 provinces.

10 THE CHAIRMAN: Wouldn't they have sales
11 figures readily available for their Ontario sales?

12 MR. CONDER: I would imagine they would.

13 THE CHAIRMAN: Mr. Brown, is that a
14 reasonable suggestion that each of your companies
15 know right at this very minute what you sell in this
16 province.

17 MR. BROWN: They should do.

18 THE CHAIRMAN: I should think the figures
19 might not be hard to be prepared. Would you agree?

20 MR. BROWN: It would not be hard to
21 prepare.

22 THE CHAIRMAN: You see, we are trying to
23 be rather careful about this inquiry in the sense
24 it must be directed, in a basic sense, to Ontario.
25 I am sure you will appreciate that, and I do not need
26 to elaborate on that point. Now, if the information,
27 the statistical information is not available and
28 cannot be readily secured with respect to this province,
29 then we of course get into the next question that the
30 next best figures would be Canadian figures. Then



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2 that would involve a consideration of whether or not
3 Canadian figures should be taken and broken down by
4 population in the country, which would obviously
5 require the consideration I have indicated a moment
6 ago, consideration of whether or not any weighing of
7 those figures was involved, either up or down.

8 I think we must keep in mind as a basic
9 target of all the inquiry before this Committee, that
10 we are concerned with Ontario basically. If of
11 necessity we have to relate to national figures, then
12 we will.

13 MR. RICE: Can we then ask your
14 Association to explore the preparing of Ontario
15 statistics, and filing them with the Committee?

16 MR. CONDER: Would you be a little more
17 precise, Mr. Rice, on exactly what you want?

18 MR. RICE: In particular, we are
19 interested in what is the total sale in Ontario; that
20 is, on manufacturing levels. Also how they would be
21 broken down to wholesalers, retailers, institutions,
22 and then also, the survey which was made on page 30
23 of your brief, could that be related to Ontario,
24 national figures there, total income from Ontario
25 sources, and what is the profit of Ontario.

26 MR. CONDER: This latter one might be
27 rather difficult to obtain because the operations of
28 the companies are taken on their overall operations.
29 In other words, the breakdown of their sales dollar
30 is on the overall operations of the company and not



1
2 necessarily on the operations within a specific
3 province. I believe that this could be explored with
4 the companies, but this might prove a problem, from
5 an accounting viewpoint.

6 MR. HUME: Then, so we might fully
7 understand, perhaps Mr. Rice might suggest some
8 assistance. If you take item 4, materials, this is
9 based upon ---

10 THE CHAIRMAN: What are you referring to?

11 MR. HUME: Page 31, Mr. Chairman,
12 breakdown of sales for Ontario -- my question that
13 arises how do you break down things like material
14 and sales tax and excise tax, because these are
15 purchased on an overall basis, and it would seem to me
16 very difficult, and I am only just trying to clearly
17 understand what you are after.

18 It seems to me to be very difficult to
19 co-relate this table on page 30 and 31 to Ontario
20 unless you had a company that did nothing but sell in
21 Ontario and nowhere else. Otherwise how would you
22 allocate your expenses?

23 THE CHAIRMAN: Until we have a little
24 more time than since last week, Friday, to consider
25 the content of this brief, I don't think I can answer
26 your question either.

27 MR. HUME: I wonder, sir, then whether
28 Mr. Rice or the Secretary in due course, after you have
29 had an opportunity to consider, would let us know by
30



1
2 letter what it is you want.

3 THE-CHAIRMAN: The point I am trying
4 to make, you must appreciate from a jurisdictional point
5 of view, our objective must be Ontario, so we try to
6 build the story -- we must try to build our story
7 and evidence around the business done in this province.

8 Now, it may be that the national figures
9 are representative and may be taken as such. It may
10 also be that by virtue of the many geographic and
11 economic factors which exist in Canada -- and I am
12 sure in your experience, Mr. Hume, you must be aware
13 of these factors -- that it may be it is obvious
14 there is a greater consumption, for instance, of drugs
15 per capita in Ontario than there might be in Prince
16 Edward Island.

17 MR.HUME: I am sure there is.

18 THE CHAIRMAN: That would mean in taking
19 national figures by population proportion would not be
20 a proper basis. I am only trying to give you the
21 spirit of what is in the Committee's mind.

22 MR. HUME: Mr. Chairman, I appreciate
23 your problem. I am only just trying to be sure that
24 I, as counsel, understand what Mr. Rice is asking.
25 Mr. Rice would agree I think the ideal thing would be
26 to rewrite pages 30 and 31 relating to Ontario.

27 Now, my problem that arises immediately is
28 how do you allocate, if you are doing business on a
29 national basis and you are paying excise and sales
30 tax and material costs, the problem is how do you



1
2 allocate those when you are actually doing business
3 other than in Ontario?

4 THE CHAIRMAN: You allocate them on the
5 dollar sales that are applied to Ontario. Some
6 percentage will exist.

7 MR. HUME: Well, if a company is, for
8 example, -- as I understand, Mr. Chairman, in some
9 parts of this industry the drug costs the same no
10 matter whether it is bought in Victoria or Montreal
11 where it is manufactured. In other words there is a
12 benefit of transportation. This would have to be
13 related. I suggest, sir, if you could indicate after
14 your study more precisely what is the information you
15 require on the Ontario basis, I am sure Mr. Conder
16 would agree to do everything he can. You see, the
17 Association hasn't got this information. What we
18 have to do is go back to the members and we would be
19 pleased to do that if you know what it is you want.

20 THE CHAIRMAN: I think this is a matter
21 that Mr. Ayres will advise us on, and we will proceed
22 after we have discussed it with him.

23 MR. RICE: Mr. Conder could you give the
24 Committee any estimate as to the relevancy of these
25 figures on pages 30 and 31 to Ontario? Are they
26 fairly representative of Ontario?

27 MR. CONDER: I honestly could not say that,
28 Mr. Rice, I would presume they would be.

29 MR. RICE: Of these 43 companies, that
30 you sent the questionnaire to, what percentage of those



1
2 companies would be Ontario companies?

3 MR. CONDER: This would be hazarding a
4 guess on it, Mr. Rice. I would presume between 40
5 to 50 per cent.

6 MR. RICE: And the returns that you
7 received and used in the analysis here, what percentage
8 of them would be Ontario companies?

9 MR. CONDER: That would be the amount I
10 stated because there were 43 companies, and figures
11 roughly of 43 companies appear in here. I believe
12 we had 45 returns to this particular survey, and two
13 of them could not be used, and we used 43.

14 MR. RICE: Of that 43 companies on page
15 30, where would they fit in in the concentration of
16 companies as shown on page 6 of Doctor Dixon's
17 analysis? Would that be down among the first companies
18 that share 43 per cent of the business or are they
19 among the latter part of the firms referred to that
20 share the remaining 10 per cent?

21 DR. DIXON: May I answer that?
22 I don't think that you can answer that -- at least,
23 we can't right now. (1) because in that report
24 individual sales figures are not available, that is,
25 population, and also the same applies to the figures
26 supplied in the DBS report, and both of them were
27 aggregates. The only way that could be obtained
28 would be by individually determining the sales of the
29 company.

30 THE CHAIRMAN: Isn't that our intention?



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2 DR. DIXON: This is something that has
3 not been done. These have been aggregated. It may
4 well come out in the request that you send.

5 MR. RICE: How representative is this
6 analysis that is made on pages 30 and 31 to the
7 industry, and I submit that would depend on where these
8 industries are placed in regard to concentration.

9 MR. CONDER: Our Association does, of
10 course, represent the large companies, the medium sized
11 companies and also small companies. On the representative
12 basis I would venture that the companies involved in
13 this particular survey would represent a considerably
14 large proportion of the total Canadian market.

15 MR. WHITE: A hundred and thirty million
16 out of a hundred and fifty-five million.

17 MR. CONDER: Not necessarily, Mr. White,
18 because I believe this other figure is for a different
19 period. Ours is for 1959, and figures are not
20 available from DBS for 1959.

21 MR. BRYDEN: Would it be feasible to ask
22 if the actual returns that were made, not only in this
23 but other surveys which were referred to in this brief,
24 the basis of all this material is presented in terms
25 of averages, and I agree I don't see how else you could
26 have presented it, but averages can sometimes be quite
27 misleading. You can have a few firms that are a long
28 way off on the average. The average may actually
29 represent anybody. It would seem we may get a clearer
30 picture of the significance of these and other surveys



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that are referred to in your brief if we could actually
see the raw material on which it was based.

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(Page 1214 follows)

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2 MR. BRYDEN: The returns that were
3 submitted by the manufacturers. One of the reasons
4 I would ask for that, is that in my limited efforts
5 in this direction I found it very very difficult
6 to get any information about pharmaceutical
7 manufacturing companies. I don't think there are
8 more than one or two of them in the Financial Post
9 survey on industrials. Maybe a few more in Moody's
10 I haven't looked there. Most of them seem to be either
11 private companies or else subsidiaries of American
12 Companies that do not have any financial returns.
13 Perhaps some of your surveys would be helpful in
14 letting us find out the operation of the individual
15 companies.

16 MR. CONDER: I would just like to make
17 this observation first Mr. Bryden that there is --
18 frankly, I was quite surprised in the similarity
19 of these two surveys, when I referred to the 1958
20 survey to the 1959.

21 We are comparatively new in our particular
22 association, in surveys of this nature. In 1958 we
23 had 28 companies answer this survey. In 1959 when we
24 were preparing the material specifically for this
25 Committee, 43 companies answered and yet the comparisons
26 between the two are fairly close.

27 These surveys, by virtue of the fact
28 that our companies are rather competitive and it is
29 difficult to ask them for material without a guarantee
30 that this material is not going to go out, we asked in



1
2 this specific case our accountants to process the
3 material, take the material off the returning forms,
4 give us the results of the thing, state that these
5 results are as shown, and then destroy all returns.

6 MR. BRYDEN: So that you think in most
7 cases the returns have already been destroyed?

8 MR. CONDER: I would presume so.

9 THE CHAIRMAN: I think that is a very
10 proper way to go about the thing. This is a very
11 usual way of submitting the information in a
12 confidential way to a neutral authority. Or is Glover
13 and Company a neutral authority?

14 MR. CONDER: Yes. Henry Glover and
15 Company we asked to compile this particular survey
16 for 1959, to assess all the results. When we
17 received the results from them we compiled this
18 particular tabulation, sent a copy of it to Henry
19 Glover and Company. The Accounting firm, in turn,
20 stated that these figures that we have used here
21 are exactly as they have received them themselves.

22 THE CHAIRMAN: Mr. Bryden, the purpose
23 of retaining Mr. Ayres and having him available was
24 just for such circumstances as this. I am not
25 interested in the names of any one company. I am
26 interested in specific instances, as they exist, or
27 if they exist on a particular subject but I think this
28 is probably a matter of where your needs can be
29 met by asking Mr. Ayres to consult with Glover and
30 Company and to look into the matter of the



1 computation. This is not a witch hunt, you see.

2
3 MR. BRYDEN: I quite agree that this is not
4 a witch hunt. The only thing is, when you have any
5 average figure showing that the profit in the
6 average of all of them was 6.4 per cent, or whatever
7 it was, I think it is useful information, and not
8 in the nature of a witch hunt to have some information
9 on the distribution of firms in the profit scale.
10 The 6.2 average could range all the way from zero
11 for some firms to 20% for others. I wouldn't know if it
12 does at all.

13 THE CHAIRMAN: That is a correct statement.
14 You are accurate in that, and I would think that
15 maybe Mr. Ayres might look into this matter with
16 Messrs Glover and Company and have a look at the
17 spreads and give us your comments on that. Quite
18 right, you could have one company with 80% and 122
19 at 2% and the average would be brought substantially
20 down. I mean that is obvious. Would you do that
21 Mr. Ayres please?

22 MR. RICE: Mr. Conder from the brief
23 it would appear that there are a number of factors
24 that are stressed as affecting the industry on the
25 particular price of drugs. One was the research and
26 development program that companies are obliged to
27 maintain.

28 Do the companies interchange information,
29 and is there a free exchange of information on
30 research?



1
2 MR. CONDER: Some companies may exchange
3 information, although I doubt it because the research
4 that the individual companies engage in is primarily
5 the reason that they are in the business of supplying
6 pharmaceuticals.

7 They allocate part of the cost of
8 operation in to research with the hope of finding
9 some new product which might be an improvement over
10 an existing product on the market, or come out with
11 a completely new product which would materially
12 affect that particular company's sales.

13 If they exchange this information
14 freely, then possibly, and as I say possibly the
15 incentive for discovery might not be as strong.

16 MR. RICE: This would lead then to
17 a duplication of a large amount of research in
18 Canada wouldn't it?

19 MR. CONDER: Yes sir, the duplication
20 by its very nature is the prime result of
21 discovery.. As I mentioned earlier in this present-
22 ation, the number of companies engaged in looking
23 for a specific substance, for example, some form
24 of new drug therapeutic substance for carcenoma,
25 the more companies you have looking for that the
26 sooner you are going to find it, find the answer to
27 it.

28 Research people are peculiar, in one
29 sense, and that is that they follow one specific line
30 of reasoning. It would be virtually impossible,



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2 to my understanding, for a specific scientist to
3 cover all phases of the area of research. He
4 must of necessity limit himself to one area. You
5 have one particular company that might be working
6 on a compound going in this direction, and then
7 you would have another company working on a similar
8 compound going in another direction.

9 MR. RICE: Would it not speed up the
10 process of discovery, and so on, if there was
11 interchange of information?

12 MR. CONDER: No, not necessarily because
13 the whole nature of the industry, in this case,
14 is to attempt to bring out, develop a new product.
15 If they did exchange, or make all of this information
16 completely available to other companies, then it
17 would take away that incentive.

18 This does not necessarily mean that
19 it is not done. I mean as soon as someone brings
20 out a new substance, or has embarked on a new
21 development, that is presented in technical papers,
22 scientific journals, and medical journals. In other
23 words, the scientist himself presents the paper
24 before some recognized body, and that information
25 immediately is available to everyone else working
26 on that specific problem. They in turn can take
27 a look at this new information and see if that might
28 add to what they have, and come out possibly with
29 an even superior form of medication.

30 MR. RICE: Is there much co-operation



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2 between companies and other independent laboratories,
3 for example. Connaught Laboratories on exchange
4 of information in this research field?

5 MR. CONDER: I honestly don't know
6 what the position would be in respect to Connaught
7 Laboratories and other companies.

8 MR. RICE: Now on page 40, I believe
9 of your brief, you pointed out that approximately
10 6.3 -- not approximately, I think your figure of
11 6.2% of gross sales accounted for research and
12 development and of this amount it would appear that
13 less than 50% is spent in Canada. Now do all companies
14 have a research and development program?

15 MR. CONDER: No sir, not all companies
16 do. The majority do have some form of research and
17 development tie-in because it would be virtually
18 impossible for any company to move ahead unless
19 it had some means of capitalizing on research and
20 development facilities in some way or another.

21 Some small companies, for example,
22 which may not have the facilities themselves and
23 for this I might comment on a specific Canadian
24 company or wholly owned Canadian company which may
25 not have a sufficient volume to support its
26 own research, it is conceivable that that particular
27 company may work out an arrangement whereby it has
28 a research tie-in with some large laboratory
29 in Canada or in another country.
30



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2 MR. RICE: Of the 22 firms reporting,
3 on page 40 of your brief, how many of these firms
4 have reasearch and development programs, or would
5 they all have?

6 MR. CONDER: It depends on what your
7 definition would be of research and development
8 in this case. We have 22 companies, I believe 21
9 of these are actively conducting clinical research
10 studies in this country, while 11 are engaged
11 in some form of pure and applied research and
12 development in Canada itself.

13 MR. RICE: Well if there are a
14 large number of companies that do not have a research
15 and development program would that not affect that
16 figure of 6.3%? In other words I am saying that
17 this figure is based on all the companies reporting
18 having a research and development program?

19 MR. CONDER: Yes.

20 MR. RICE: Would it be different if
21 there are a large number of companies that do not
22 have a research and development program?

23 MR. CONDER: That is the reason I
24 gave this breakdown on the bottom of the page
25 showing the research and development as a percentage
26 of sales for the number of firms reporting. It
27 varies from, as you will notice, 5% to 15% depending
28 on the size of the company, the amount of research
29 involved, and other factors.

30 MR. BRYDEN: What about the firms



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2 beyond the 22?

3 MR. CONDER: I honestly don't know
4 because Mr. Bryden we tried to get as much
5 information as we possibly could. This is the
6 very first time that we have ever attempted to
7 get information of this nature, and it was done
8 specifically to try to be of help.

9 MR. BRYDEN: It would make quite a
10 difference if these were the only companies doing
11 research all through the industry. It would cut
12 down on your average I would think.

13 MR. CONDER: Yes, it certainly
14 would but I have reason to believe that some
15 companies who are research companies did not reply
16 to this particular survey.

17 MR. RICE: Wouldn't it help the
18 Committee to find out how these 22 firms reporting
19 in this respect fit into the concentration set out
20 on page 6 of Dr. Dixon's report? That is whether
21 they are down from those companies that share a
22 large portion of the sales, or whether they are
23 pretty well spread out, or are they among the
24 companies that handle a relatively small amount.

25 MR. CONDER: I would say these are
26 fairly well spread out.

27 MR. RICE: In your opinion, they are
28 a good representative sample of the industry?

29 MR. CONDER: I believe that to be
30 a fair statement.



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2 MR. BRYDEN: Your sample is selected
3 purely on the basis of those who chose to reply?

4 MR. CONDER: Yes, that is correct.

5 MR. BRYDEN: Well that doesn't make
6 it--

7 MR. CONDER: Well actually the question
8 would be what would you consider a fair sampling
9 of companies. I know that there are some medium
10 sized companies, and some small companies tie in
11 with these things, with this particular return.

12 MR. WHITE: Using the figures here,
13 it would seem that the reporting companies took
14 care of 77 million dollars worth of sales, not
15 quite half of the industry sales.

16 MR. CONDER: That is true.

17 MR. WHITE: In fact, it might be that
18 the 22 reporting do nearly all the research that
19 is being done?

20 MR. CONDER: I do know of some companies
21 that have not replied.

22 MR. WHITE: Why didn't they reply?
23 I cannot understand that. Can't you persuade
24 them to reply in the interests of the industry?

25 MR. CONDER: We are attempting to do
26 this, in some cases, but as I pointed out earlier,
27 this business of collecting statistics is
28 comparatively new to our industry.

29 We have attempted to do this, to
30 get information for various reasons over the



1
2 years. During the years we have been able to achieve
3 some form of success. In our 1958 annual statistical
4 survey only 28 companies replied as against 43
5 this time.

6 MR. HUME: I think Mr. White, Dr.
7 Dixon did the arithmetic and actually you got about
8 89 million reporting out of 130 millions so that
9 your figure is just about right, it is slightly
10 more than half the sales volume.

11 MR. WHITE: I was using the 6%. I
12 guess that is 1958.

13 MR. RICE: Could you give any estimate
14 as to how many of these 22 companies reporting would
15 be Ontario companies?

16 MR. CONDER: You mean companies with
17 head offices located in Ontario?

18 MR. RICE: I was thinking more of
19 companies primarily doing business in Ontario,
20 whether they did any research here or not.

21 MR. CONDER: Oh, I see. I would hesitate
22 to.--

23 MR. HUME: You mean a company with an
24 Ontario charter? A Dominion company having a head
25 office here? Any company, no matter where they are
26 incorporated. When you use the words "Ontario company",
27 that is normally a company incorporated under the
28 laws of the Province of Ontario.

29 MR. RICE: Any company doing business
30 in Ontario, licenced.



1
2 MR. HUME: I just want to find out
3 what Mr. Rice means so that the answer may reflect
4 what you mean.

5 MR. RICE: What I was meaning was a
6 company that does a large volume of business in
7 Ontario, whether it is a Dominion company, Ontario
8 company or foreign company.

9 MR. HUME: In that context.

10 MR. RICE: And give some relation
11 of the business it does in Ontario, or research
12 it does.

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1 MR. CONDER: I could not say offhand
2 exactly the breakdown on this. As I mentioned from
3 the viewpoint of the companies themselves, this
4 includes wholly owned Canadian companies and subsidiaries
5 of foreign companies. I would venture that all
6 of these companies do operate in the Province of
7 Ontario as well as in other provinces across the
8 country.

9 MR. RICE: Are the research and development
10 programs referred to in your brief mainly in connection
11 with looking for new techniques for established drugs,
12 new techniques for manufacturing them, or is it an
13 effort to discover new drugs?

14 MR. CONDER: I think it is an interesting
15 point, this particular one. I think many people are
16 under a misunderstanding that because a company is
17 engaged in the development of an existing product,
18 that the research in that respect might not be as good
19 as the research involved in a pure form of research.
20 That is erroneous because many of our discoveries today
21 have actually come from other products. In other
22 words I have an example here.

23 May I take the time of the Committee for a
24 moment and read a few of these examples.

25 "In many cases, modifications of existing
26 drugs has led to the development of drugs
27 superior to the original products. For example,
28 the very toxic sulfanilamide has been replaced
29 by the newer, less toxic drugs such as sulfadiazine,
30



1
2 etc. In other cases, work on existing drugs
3 in an attempt to improve them has led to
4 completely new discoveries. Some examples of this
5 are:

6 1. Sulfa drugs. Here, investigation led to the
7 development of non-metallic organic diuretics
8 such as Diamox and Diuril and its derivatives.
9 In addition, the oral hypoglycemic agents
10 such as B2-55 and Orinase were also uncovered
11 as a result of work on sulfas.

12 2. In attempting to improve upon existing local
13 anesthetics, Bovet and Forneau developed
14 compounds which led to the drugs currently
15 used as antihistaminics. And subsequent efforts
16 to perfect better antihistaminics led to the
17 discovery of the atarretics and anti-emetic
18 drugs of the Phenergan type.

19 3. Dr. Berger was attempting to perfect an
20 antispasmodic superior to Tolseril when
21 he discovered Meproamate."
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1 From this picture of research, you could
2 conceivably find that a company working on the develop-
3 ment of a new product can conceivably bring out a
4 better discovery than a company working on what you
5 might term "pure form of substance."

6 In answer to your specific question, it
7 would be extremely difficult to break this down as
8 to what percentage a company spends in this particular
9 area. In other words, do they spend 10 per cent of
10 their time in pure research and 90 per cent in develop-
11 mental research, or whatever it may be.

12 MR. RICE: The reason I asked the question
13 was that from information we have received a great
14 number of new drugs that are launched every year
15 are merely an combination of ingredients already
16 on the market. Sometimes it is estimated that is two-
17 thirds of the new drugs. I was interested in your
18 comments on that type of statement that has been given
19 to the public.

20 MR. CONDER: No, the actual amount of what
21 you might call "purely duplicate products" -- this
22 would be a product which one company brings out and
23 which is already on the market. I would think that
24 is what we would consider to be a duplicate product.
25 A company might spend a considerable amount of time
26 in working on what it considers to be a compound product,
27 and this compound product might bring with it results
28 which were hitherto unknown or of extreme value to
29 the medical profession.
30



1 THE CHAIRMAN: Is that the phrase, "compound
2 product"?

3 MR. CONDER: That is one that is used.

4 THE CHAIRMAN: Meaning a combination of
5 different substances?

6 MR. CONDER: A combination of different substances.

7 THE CHAIRMAN: Or established drugs?

8 MR. CONDER: Yes.

9 THE CHAIRMAN: As opposed to a single chemical
10 substance?

11 MR. CONDER: Yes.

12 THE CHAIRMAN: Does it mean a combination of
13 chemicals or biologicals, or does it mean a combination
14 of established drugs?

15 MR. CONDER: It could mean a combination
16 of chemicals. It could mean a combination of established
17 drugs. There is nothing specific in that case.

18 MR. BRYDEN: Leaving compounds aside for a
19 moment and talking about a subject which is not greatly
20 different and falls into the category of what Mr.
21 Brown or Mr. Connor, the president of the Merck Company
22 called "molecular manipulation", that is somebody gets
23 a product as a good seller which may possibly have
24 been patented and other companies just play around
25 with it. That is not the exact word, but they look
26 around for a new product so that they can crash into
27 the market and get a share of it.

28 For example, Mr. Dickson referred to his
29 article of Silverman in Fortune Magazine.
30



1 Reading that I would get the impression
2 that a very substantial proportion of the industrial
3 research is in that molecular manipulation category,
4 and judging from what Silverman says, whether it
5 is true or not, in a company such as Pfizer, most
6 of its research work is trying to duplicate things
7 sufficiently so that it can evade any possibility
8 of patent infringement. On the other hand they put
9 the product under another brand name on the market
10 which does not have any real therapeutic difference.

11 THE CHAIRMAN: So that I can follow your
12 line of questioning, Mr. Bryden, are you suggesting
13 that that is wrong?

14 MR. BRYDEN: I am not really concerned with
15 the ethics of it, Mr. Chairman for the moment. I
16 think that the point I am getting at is, I think it
17 leads to a proliferation of products on the market
18 which has important consequences right through the
19 whole industry.

20 THE CHAIRMAN: I am trying to stay with you
21 and just get the principle behind it. Would that
22 follow, then, that whoever built the first small car,
23 that no one else should build a small car with 75
24 horse power?

25 MR. BRYDEN: I am not really concerned about
26 whether he should or should not. I am really interested
27 in the fact of the activity, which from my reading
28 on the subject I think is very substantial.

29 For one thing, they make for very substantial
30



1 duplication of products which also may make for
2 promotion that may be excessive and every dangerous.
3 Those are some of the things that we will probably
4 get into a little later on, and I am just now concerned
5 about the fact that this goes on to a considerable
6 degree. I have a lot of references here that seem
7 to indicate to me that it does.

8 MR. HUME: Are they Canadian or American
9 references?

10 MR. BRYDEN: I have some that are Canadian
11 and some references that are American. A good many
12 of these products are on the market in Canada and
13 come from the United States or other countries.
14 For instance, you mentioned steroids as an example
15 of duplication.

16 I have the reference here from people that
17 I think may be authoritative who say that most of the
18 parade of steroids, as one man from John Hopkins
19 referred to it, is really a big waste and you were
20 not getting anything new, and it even says here as
21 evidence from the appearances before the Kefauver
22 Committee:

23 "Now for the parade or steroids -- let me
24 put it this way. In coming out with one new
25 steroid after another, I think various pharmaceutical
26 firms have tried to enlist doctors' support
27 by one of two devices. The first is what I
28 like to call the pharmaceutical numbers racket.
29 This is where a compound is alleged to be better
30



1 than another, more potent because one can give
2 let's say two milligrams instead of 15 of a
3 rival product."

4 "The other side of the coin is the low
5 toxicity approach. Here the problem becomes
6 very, very difficult indeed. Steroids have
7 to have free use of the profession at large for
8 a good while before their toxicity can be
9 adequately evaluated. The amount of drugs that
10 is given to a patient, the duration of treatment,
11 the type of patient, the care with which a
12 physician looks for let us the development of
13 ulcers by routinely taking gastro-intestinal
14 x-rays and his patient, all of these things will
15 determine what the inference of side effects
16 truly is."

17 His suggestion is that it would not really make any
18 difference to the practice of medicine if a lot of
19 the steroids had never got on the market.

20 I also have for a Canadian reference an article
21 in the journal of the Canadian Medical Association
22 for April 1st, 1959, which does not deal particularly
23 with steroids but deals with drugs generally.

24 It says much the same thing only probably even in a
25 more extreme form. That is the type of problem in
26 my mind.

27 DR. MR. CONDER: That comes into the form of
28 what you might call minor modification of existing
29 products in a sense. If this work of trying to improve
30



1 on a product were stopped, if this had happened at
2 the time of discovery of penicillin, we would probably
3 have had none of the products which have come out
4 since, if that were the case. That is an extreme
5 example. If you put in any form of system of hindering
6 this type of research, it would do a lot of harm
7 to the progress of medical therapy. Any system which
8 restricts research to a fundamental group of companies
9 would undoubtedly delay the progress of medication.
10 This is borne out by another authority, and this
11 happens to be a Nobel prize winner, Dr. Philip S.
12 Hench, M.D., former head of the Department of Rheumatic
13 diseases, Mayo Clinic who states this:

14 "...There is really a minor modification
15 that makes all the difference in the world...
16 For example...a compound called hydrocortisone,
17 and that one simple change made all the
18 difference in the world...if we were to ask the
19 pharmaceutical chemist not to bother with
20 minor modifications...we might miss some of
21 the most amazingly helpful cortisones that
22 would ever be discovered."

23 I would like to point out one other thing
24 as a general statement on this. It was estimated
25 a number of months back that almost two-thirds of
26 the sales of this industry in 1965 will come from
27 products not now on the market, which have yet to
28 be developed, and which may or may not be in the current
29 stage or research.
30



1 This point of minor modification is an
2 extremely difficult one to pin down, primarily because
3 so many discoveries have resulted from work on
4 minor modifications.

5 MR. BRYDEN: A great deal of the minor
6 modifications are just a form of promotion and not
7 really research at all.

8 THE CHAIRMAN: How much, Mr. Bryden?

9 MR. BRYDEN: I would not like to estimate
10 how much. It would appear it is substantial and
11 that no major breakthroughs in recent years have
12 come that way.

13 THE CHAIRMAN: Wait now, just a minute. Let
14 us get the facts. Are there no major breakthroughs
15 in recent years? Is that the question? You are
16 making a statement. Let us get the witness to answer.
17 We are listening.

18 You are saying there have been no major
19 breakthroughs. Is that the evidence per se?

20 MR. CONDER: No sir, it has been to the
21 contrary.

22 MR. BRYDEN: I can give you lots of references.

23 THE CHAIRMAN: These gentlemen are here as
24 witnesses before us, and I think you must ask them
25 the questions.

26 MR. WHITE: Mr. Chairman, this brief is
27 so long and so detailed it will take many hours to
28 ask questions which relate to the factual aspect
29 of the problem. It seems to me these comments are more
30



1 properly part of the conclusions of the Committee.

2 I think that we should restrict these
3 questions to the facts and not start to philosophize
4 and argue. I have a great many questions to ask which
5 are short and pertain to the facts and which are
6 intended to bring out the truth of the matter.

7 MR. BRYDEN: I am suggesting to you, sir,
8 that my questions are intending to bring out the
9 truth of the matter, too. I do not think we are
10 in a court of law here going through sworn evidence
11 and arguing later. It seems to me that the two things
12 are related, the argument and the evidence. The
13 brief itself is essentially argumentative. It consists
14 in the main of a substantial number of generalizations
15 which I think should be tested.

16 THE CHAIRMAN: Let us discuss the testing
17 then through our counsel, Mr. Rice. This is the
18 procedure agreed upon, suggested by the Committee
19 itself, and I think we should let Mr. Rice proceed
20 with his questions.

21 MR. BRYDEN: I am content to let him go
22 ahead.

23 MR. RICE: Mr. Conder, I note that the figure
24 of 6.2 per cent of gross sales goes to research.
25 In your brief on Page 30 and 31st it is noted. Will
26 you explain how that is reflected into the breakdown?

27 The next page follows.

28
29 (Page 1234 follows)
30



1
2 MR. CONDER The breakdown on pages 30
3 and 31, Mr. Rice, are the operations of the company
4 as a whole. For example, you cannot -- or it could
5 be done presumably, but we cannot for this particular
6 purpose show a specific action within the company by
7 itself. In other words, the costs of any person
8 engaged in the form of research in the company, his
9 wages and salaries would be included with the wages
10 and salaries of everyone here, including lab workers,
11 or administrative staff, and so on. Materials used
12 in the various operations, I presume from an accounting
13 point of view, would be included under materials.

14 MR. HUME: Everything would be included,
15 employee benefits, material, sales tax would all be
16 reflected under all the activities.

17 MR. WREN: I would say, Mr. Chairman,
18 that is rather a loose accounting procedure if that is
19 so. For example, take employee benefits. You take
20 the trouble to separate them in the item, 1.7 per cent
21 of your expenses, and yet you indicate research runs
22 as high as 15.1 per cent in some cases. I would think
23 you could separate it. Certainly salaries and wages,
24 every well-run company breaks down the salaries and
25 wages into the various departments and categories.

26 MR. CONDER: That is quite correct, Mr.
27 Wren, the companies would probably do it themselves,
28 but we needed this for comparison purposes and we
29 actually took these to see how we stacked up against
30 the Canadian Manufacturers Association. We took



1
2 precisely the terms of reference that have been used
3 for overall manufacturing.

4 MR. WREN: Yes, but your purpose in this
5 brief, as I take it, would be to acquaint the public
6 through this Committee with the contribution you are
7 making to society, among other things ---

8 MR. CONDER: Yes.

9 MR. WREN: I would think that if research
10 represents a significant percentage of the cost, that
11 you would make an attempt to separate it from your
12 other expenses. In fact, make a special attempt.

13 MR. HUME: That is done on the survey.
14 The companies themselves broke down their own accounting
15 systems to come up with the return, but if you have
16 a research chemist who gets a benefit accountingwise,
17 and I think Mr. Ayres will bear me out on this, it
18 would be shown on the company's books, as being the
19 receipt of the employee benefits, which is the
20 Canadian Manufacturers Association term.

21 MR. WREN: Well, I have some things to
22 do with the steel industry, and I know they take their
23 research costs right down to the cent from all
24 departments. They can tell you at any given moment
25 what the research is.

26 MR. HUME: I think these companies could
27 too.

28 MR. WREN: I agree that they could, but
29 what I am saying is that they should when they are
30 attempting to demonstrate the role they are playing in



1
2 our society, in a beneficial way; they might separate
3 research ---

4 MR. HUME: They did on page 40, but you
5 are looking at page 30 and 31 where it was attempted
6 to co-relate it with the Canadian Manufacturers,
7 so that you can make a comparison and arrive at your
8 conclusions.

9 MR. WHITE: I think Mr. Wren's point is
10 that 22 of the firms did and the remainder did not.
11 If you take the total, instead of taking 6.3, it might
12 be 3.5.

13 MR. HUME: Yes, or 10.8.

14 MR. BRYDEN: Not likely 10.8. The ones
15 that don't do research would be certainly less inclined
16 to reply than the ones who do. It would seem so on
17 the face of it.

18 MR. CONDER: We have merely taken this
19 formula on the breakdown of the sales dollar to compare
20 with other industries, and if we took our research
21 cost out of here -- this was originally thought of it
22 -- if we took our research costs out, for example,
23 then we would be taking away the wages and salaries
24 of the people that are working on that from the wages
25 and salaries of the main part, and it would not give
26 us quite the comparison. What you suggest is a good
27 idea, and we might very well consider this for the
28 future.

29 MR. WREN: I suggest in a kindly way
30 if your figures for research are as high as that,



1
2 public relations-wise, you are not doing yourselves
3 any good by not ---

4 MR. CONDER: This breakdown of the sales
5 dollar was not the main survey we have. This is
6 roughly the third time we have attempted to reach --
7 we have finally reached a point now where I believe
8 it is becoming more effective or giving a better
9 picture of the operation. This research example was
10 a supplementary survey to this which went out afterwards
11 in order to try and get some of the information.

12 MR. HUME: I hope it is clear to the
13 Committee that the figures on pages 30 and 31 are
14 designed only to afford the Committee a basis of
15 comparison which are the published figures of the
16 Canadian Manufacturers Association for all Canadian
17 averages.

18 I don't think they are designed to perform
19 a public relations job or to suggest any deduction,
20 good, bad or indifferent. It is merely so the
21 Committee would have comparable information from those
22 reporting, and beyond that, I don't think there is
23 any sinister motive in producing the figures. It is
24 just to provide a basis for comparison for the Committee, of
25 those reporting in this industry, with the all-Canadian
26 averages, and I might say they have had some problem
27 in getting their members to report.

28 THE CHAIRMAN: As I understand these
29 statistics, at pages 30 and 31, they mean no more and
30 no less than ---



1
2 MR. HUME: Comparison. And the Canadian
3 Manufacturers Association figures I am advised are
4 also based on percentage of revenue, and a great many
5 companies didn't see fit to report to that questionnaire
6 at all. So this Canadian Manufacturers average is
7 not a factual average. It is an average on the basis
8 of those reporting.

9 MR. WHITE: The crux of this matter, the
10 samples are so small in some instances when you con-
11 sider you have 22 reports from your membership of 54,
12 and from the industry which totals 196 or 210 depending
13 on the total you use; only 10 per cent of the companies
14 were reporting and one can't help but wonder if the
15 companies reporting are the only or the principle
16 people in the research field, in which case, the
17 percentage of laboratory research would be very small
18 indeed.

19 In another case you have 14 reports from
20 your membership of 54, and from the industry of 196
21 or 210, and there again it is far from conclusive.

22 MR. HUME: I agree. It is the best we
23 can do, and we qualify our figures by ---

24 MR. WHITE: Another thing I can't help wonder-
25 ing when you only have 14 people report, why did
26 those 14 report and not others? Was there any
27 deliberate or subtle direction given in the seeking
28 of these figures?

29 MR. CONDER: None whatever, Mr. White.
30 We sent it out and asked for the information. These



1
2 are some of the companies that did reply. We set up
3 deadlines for some of these things, but most of the
4 surveys were supplementary surveys in an attempt to
5 get information for the Committee.

6 This main survey in which we have 43 companies
7 replying went out considerably earlier, and we went back
8 after the companies that did not reply giving them
9 an opportunity to get it in. These others, we had
10 to put it in and close it off.

11 Then referring to the 14 companies specifically,
12 I can appreciate your thought on that, and frankly
13 it would have been rather nice to have more companies
14 replying to that particular survey, but it was in an
15 area on which very, very few companies were interested
16 in answering at all by virtue of the fact that it had
17 a bearing on prices.

18 MR. WHITE: As you well know, this
19 Committee will be meeting again after the session.

20 MR. CONDER: Yes.

21 MR. WHITE: I suggest that some of these
22 surveys are so lacking in detail that you should re-
23 survey them and make a fuller presentation to the
24 Committee when it meets next spring or next summer.

25 MR. CONDER: If it is the Committee's wish.
26 If that is the Committee's wish we would be glad to do
27 so.

28 MR. RICE: Perhaps, at that time, Mr.
29 Conder, too, you could include instead of statistics
30 for comparing other organizations, the Committee is



1
2 interested in where this total income of a hundred and
3 thirty and some million was received. What happened
4 to that? You say some has been expended in certain
5 ways, but we would like a breakdown of where that when.

6 MR. HUME: That seems to be impossible.
7 The breakdown -- the two statements balance. Mr.
8 Rice could see where it went. It went to wages,
9 salaries, benefits and materials, and so on. Does he
10 mean that we are attempting to develop figures showing
11 the payee of these things, who got salaries and wages,
12 and the material that was purchased?

13 MR. RICE: No, Mr. Hume, I understood
14 from your earlier remarks the statistical surveys
15 prepared at pages 30 and 31 were prepared for
16 comparing with some other survey.

17 MR. HUME: Yes.

18 MR. RICE: And the Committee is interested
19 in the actual costs and profits on drugs, so what they
20 would be interested in if after you receive a certain
21 amount of money for your sales, what happens to the
22 money?

23 MR. HUME: It is here too. These 43
24 companies got a hundred and thirty odd million dollars
25 in, and they spent a hundred and thirty odd million
26 dollars out, and the totals balance, and this tells
27 you where it went. What further can you ask? The
28 totals are there.

29 MR. RICE: Well then, sir, perhaps I
30 misunderstood your earlier remarks that it was prepared



1
2 for some comparative purposes.

3 MR. HUME: May I attempt to state the
4 situation? The Canadian Manufacturers Association
5 for reasons known to themselves have produced some
6 figures for the benefit of anybody who wants them.
7 In order to assist the Committee in comparing this
8 particular manufacturing industry with the Canadian
9 average, a questionnaire was sent out asking the
10 companies to report their net sales and their expenses
11 under the headings that appear on pages 30 and 31 so
12 that they could be compared with the Canadian Manufacturers
13 Association figures which are shown in brackets.
14 The reports came in, and the two balance. And every
15 cent that has come in is accounted for on the right
16 hand side of the balance sheet.

17 When you ask for more information as to
18 where it went, I am somewhat at a loss to know what
19 it is you want for I think you have it all.

20 MR. WHITE: What he wants to know is how
21 much the industry is spending on research.

22 MR. HUME: That is shown at page 40, Mr.
23 White. All these members who reported --- this is
24 a voluntary organization. You can't compel these
25 people to do what they don't want to do. We come up
26 with that figure. Your remark about the inadequacies
27 of these returns is quite pertinent, and this is quite
28 so in all these things. I get questionnaires across
29 my desk that I refuse to answer, and these companies
30 get the same sort of thing, ...



1
2 MR. WREN: The point at issue here is
3 simply this: All you are attempting to do at pages
4 30 and 31 is demonstrate that the Pharmaceutical
5 Manufacturers Association are not making any greater
6 profits on the average than are other manufacturers
7 in the country. That is fine as far as it goes. But
8 what we are interested to know is what portion of the
9 profits you are making are actually devoted to the
10 drug industry, and what effect does your operation have
11 on the cost of drugs. Now, in your manufacturing
12 processes there are a great many other things than
13 drugs you are dealing with.

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15 (page 1247 follows)
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2 MR. HUME: I would suggest, Mr. Wren,
3 that such a question be directed to the companies
4 themselves who no doubt will answer you. We have
5 sent out a questionnaire. This is the best we
6 can get. We could, perhaps, take another run at
7 it and see if we could get more companies to answer.
8 We are still going to come up with far less than
9 50% of our members, and the members are only,
10 as Mr. White pointed out, about 25% of the total
11 manufacturing industry.

12 MR. WHITE: I think that suggestion
13 is very good, As a matter of fact Mr. Chairman
14 I think that we are going to have to perhaps survey
15 the manufacturers themselves if we want to establish
16 this research figure; if we want to establish the
17 cost of detail men, and similar items which are
18 presently tucked into these very general accounting
19 classifications.

20 THE CHAIRMAN: Well then we might
21 write into the companies. I might say, frankly,
22 that what you said Mr. Hume is absolutely correct,
23 that yours is a voluntary organization and there is no
24 compulsion or requirement on any of your members
25 to answer. However, it is the committee's privilege
26 to test the validity of your sampling.

27 MR. HUME: Oh yes.

28 THE CHAIRMAN: If it turns out that
29 the sampling is sufficient then maybe your figures
30 are the figures that will satisfy the Committee, or



1
2 conversely, and if it is conversely, then you being
3 a voluntary organization the Committee will have
4 to secure the information itself.

5 MR. HUME: I think that is just about
6 the way it stands and Mr. Chairman I agree
7 wholeheartedly. I don't want to leave any impress-
8 ion that we are at odds. I only want to make it
9 clear to the Committee that we did the best we could.
10 There was no selection of these 22 companies.

11 We sent out our questionnaire; we
12 had to have a deadline because you gave us an
13 appointment, and we got the best returns we could
14 get.

15 As I say, if we take another run at
16 it, we might get better ones but we are not attempting
17 to argue here today, Mr. Conder is not, that these
18 are the absolute figures. We are qualifying all our
19 figures by indicating to the Committee the percentage
20 of the sampling and you can form your own conclusions.
21 This is the best we could do up to now.

22 THE CHAIRMAN: I might say that we had
23 hoped, the Committee had hoped that the Association
24 occupying the official position it does, would have
25 been able to induce the very active co-operation of
26 all its members in the information which you are
27 trying to compile.

28 I don't think that the questionnaire
29 sent out for this Committee's purpose should be
30 treated as any other piece of mail.



1
2 MR. CONDER: I think 43 companies --

3 THE CHAIRMAN: I don't want to be put
4 in the position of saying that we have adopted
5 an exploratory approach to the problem.

6 MR. CONDER: I would just like to
7 comment. I think 43 companies out of 54 members
8 is not a bad average for a return of direct mail
9 survey. I do agree that 4 and 11 companies out
10 of 54 is a very small per cent, but there has
11 been no attempt not to disclose that this is all
12 we had.

13 THE CHAIRMAN: This is a frank
14 presentation.

15 MR. McTAGUE: Just as an aside, Mr.
16 Chairman, I did a survey of the legal profession
17 at one time over a period of three years, and the
18 returns on that was not a whole lot better, and
19 some that did not answer are right in this room.

20 MR. BRYDEN: Mr. Chairman, I think
21 there is one way that the Association might be
22 able to help. I can appreciate their difficulties
23 in getting replies to a questionnaire. I never heard
24 of one yet where you got 100% replies, but if they
25 could indicate along what line -- I think Mr. Rice was
26 trying to get at it a little earlier -- what is
27 the nature of the firm who replied; not who they
28 are, but how big are they in relation to the others,
29 and what sort of distribution firms do we have.
30



1
2 We may have, in that one, that the
3 14 may be the 14 biggest firms, or maybe 7 of
4 the biggest, three of the medium sized and that
5 sort of thing.

6 If we can get some idea of the
7 nature of the samples on which these figures are
8 based, it would at least be of some use to us
9 in trying to assess the validity of the samples.

10 MR. CHAIRMAN: I thought I had disposed
11 of the matter some time ago when I asked Mr. Ayres
12 to consult with Messrs. Glover and Company. Does
13 that not answer the Committee's question at the
14 moment?

15 MR. WREN: Not if Messrs. Glover
16 and Company have destroyed the returns.

17 THE CHAIRMAN: Let Mr. Ayres make
18 his investigation and come back and tell us what
19 he finds.

20 MR. WREN: Mr. Conder indicated that
21 they had been destroyed.

22 MR. CONDER: We merely prepared these
23 things sir in an attempt to be as helpful as
24 possible. If the Committee, after looking over
25 some of these things, feel that the Association
26 can be of help to it in any way at all, I can assure
27 you that our facilities will be placed entirely
28 at your disposal in this respect.

29 MR. CHAIRMAN: I am going to rule that
30 the matter has been disposed of by my earlier



1
2 reference to Mr. Ayres. Let us proceed with
3 the questioning, Mr. Rice.

4 MR. RICE: On page 7 of your report
5 Mr. Conder you referred there, in this problem
6 of research and development, that "when one
7 company does find the solution and markets its
8 products, the other 19 have in effect lost the
9 race. They can fold their efforts on that line
10 of investigation and amortize the cost over their
11 other marketable products." Would that have a
12 tendency then to increase the cost of their
13 established drugs?

14 MR. CONDER: Conceivably it could,
15 because the operation of the company, as such,
16 their cost factors must necessarily be placed
17 over their revenue in deciding on the profit which
18 the company makes in the end, and if a company does
19 go into a line of investigation in which it feels
20 that it has a reasonable degree of attaining a
21 specific objective, and loses on that, then that
22 loss must go against the company's operation.

23 MR. RICE: So that the end result
24 then is the group of persons in society that are
25 obliged to use and purchase the drugs are the persons
26 that are paying for the research and development,
27 whether it wins, loses or draws?

28 MR. CONDER: In the final analysis,
29 that is correct.
30



1
2 MR. RICE: Now also in the brief there
3 was emphasis placed on the research and development
4 because of competition. Now once research and
5 development for a drug has been mastered then does
6 the drug company have a monopoly on that field for
7 a while?

8 MR. CONDER: No, someone else may
9 come out with probably a better product in the
10 end.

11 MR. RICE: For a period of time they
12 have had a monopoly on that product did they not?

13 MR. CONDER: You are speaking of the
14 subject of patents?

15 MR. RICE: Well you could say that
16 if you wish.

17 MR. CONDER: This is a very very large
18 area, depends a lot on the drug and the particular
19 substance that is involved but every company has
20 an opportunity to take any substance in the market
21 and attempt to improve that substance. If they can
22 find a better drug, one which might have less side
23 effects, it would be to its advantage to do so.

24 MR. RICE: Do a large number of
25 companies manufacture different ethical drugs?
26 In other words, a drug that one manufacturer
27 produces may not be produced by another manufacturer?

28 MR. CONDER: Yes, that is correct.

29 MR. RICE: For one reason or another.

30 MR. CONDER: Yes, That is done.



1
2 MR. RICE: So that the word "competition"
3 as it is used in the brief here may not have the
4 same meaning as competition by manufacturers
5 who market the same products here; the manufacturers
6 are marketing and manufacturing different
7 products and yet you say compete with each other.

8 MR. CONDER: These companies manufacture
9 different products but that does not necessarily
10 mean that these products are different in their
11 application to the medical need. It could possibly
12 be that you may have three companies turning out
13 different products, in essence, which might be
14 used by the doctor to treat one specific form of
15 ailment.

16 MR. WHITE: You did speak of the brand
17 of licencing which gives a manufacturer a temporary
18 monopoly.

19 MR. CONDER: No, I wouldn't exactly call
20 it a monopoly Mr. White.

21 MR. WHITE: You did call it a monopoly.

22 MR. HUMB: Dr. Dixon said that.

23 MR. WHITE: Excuse me.

24 DR. DIXON: I qualified that, if you
25 notice in the next phrase or sentence to say
26 probably a degree of stickiness.

27 I would like to substantiate, first
28 of all, what Mr. Conder says that although they
29 are different products, in some cases there is a
30 very high degree of substitution between them. In
the tranquilizers, for example, they all seem



1 different, but most of them or at least four or
2 five or six or ten of them have application to
3 a particular ailment. This is entirely conceivable:
4 occasionally a company will latch on to a product
5 which nobody else has. I think this is bound to
6 happen, not just in the pharmaceutical industry
7 but anywhere else.

8
9 I think my specific reference was
10 that this is probably one of the -- I feel and also
11 I think I mentioned this that this is one of the
12 necessary adjuncts to moving ahead. This ties
13 in with my previous discussions about risk and the
14 willingness to gamble, if you will, with a new
15 product.

16 If there was no possibility of obtaining
17 any advantage, and I might also point out the
18 advantage does not last very long, if at all to
19 firms, it seems to me to be reasonable that this
20 would have an effect on the rate of willingness to
21 gamble but I would not call it a monopoly in the
22 sense monopoly is normally used. This is an
23 economist talking, not the public concept of
24 monopoly; merely a degree of stickiness involved.

25 MR. WHITE: I agree with what you said
26 the only trouble is that a monopoly does inflict
27 a very serious social injury on some members of
28 society while a temporary monopoly is in effect
29 when the prices are very high, and there are many
30 people who cannot afford to buy their drugs, which



1
2 might be a life saving drug. If you are talking
3 about vacuum cleaners, I would not have any
4 quarrel with the idea.

5 DR. DIXON: I cannot say that I am
6 willing to agree that the price will be high for this
7 reason: I think the firm -- if I were advising
8 at least -- would certainly have to be continually
9 recognizing the fact that tomorrow, although they
10 have a monopoly today, it won't be a monopoly
11 tomorrow, on the one side, and the other is that
12 presumably they have some reasonable expectation
13 to reach as many people as possible. They also
14 have to sell many other products, and the total
15 image they project is going to be significant.

16 I think the main thing is that through
17 experience they have not had the amount of security
18 from competition substitution that would let them
19 act as monopolists, if you will. This has been the
20 main line of my argument in the presentation, and
21 the firms cannot presume they are monopolists, if
22 they do happen to discover something unique for
23 the moment. Their behaviour will not be that of a
24 monopolist with a competitive firm.

25 MR. SUTTON: Is this kind of reasoning
26 encouraged by the fact that only a process can be
27 patented instead of the product? In other words,
28 the manufacturer spends a lot of money in the
29 hope that he can make a slight change in the
30 process and put actually the same product on the



1 market.

2
3 DR. DIXON: I personally do not
4 even feel that patenting is particularly significant
5 here because you can modify the product or the
6 process to make your product.

7 MR. SUTTON: Don't you agree that the
8 patent gives the manufacturer a 17 year monopoly
9 unless someone else finds a product that is--

10 DR. DIXON: I think the key to that
11 is "unless somebody else finds a product" and
12 certainly historically in industry "unless somebody
13 else finds a product" tends to happen rather
14 rapidly.

15 THE CHAIRMAN: Or a process.

16 DR. DIXON: Some of the examples,
17 for instance, that Mr. Conder mentioned in his
18 brief were developed and processed by a particular
19 pharmaceutical company, and right on their heels
20 five or six or seven other firms come up with
21 different processes to make the same product.

22 MR. BRYDEN: That happens sometimes
23 and there seems to be some -- or is this true: there
24 are some places where it doesn't seem to happen?
25 For example, largactil, which is a pretty important
26 drug in the treatment of mental illness, as far as
27 I can see from looking at the publication nobody
28 has a drug competing with them. There is a firm that
29 have a patent, or whatever it is, for chlorpromazine
30 and they licenced it to Smith Klein French in the



1
2 United States and their own subsidiary here handles
3 it but it would appear that nobody has really
4 got a direct substitute, as I think happens in
5 some other fields.

6 DR. DIXON: I will have to beg off at
7 this point.

8 THE CHAIRMAN: We will take a 5 minute
9 recess.
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1 ---On resuming at 11:55.

2 THE CHAIRMAN: Gentlemen, in discussion
3 with some of the members of the Committee during
4 the recess, we have proposed to adjourn at 12:15
5 for lunch and resume at 2:00 o'clock.

6 MR. RICE: Mr. Conder, before the recess
7 the question was along the line of competition
8 in the pharmaceutical industry, and whether it was
9 competition in the true sense of the word, competition
10 in competing products or whether there was a different
11 aspect of competition in the pharmaceutical industry.

12 I believe the Doctor had indicated that
13 rather than monopoly, it is a security type of
14 control that some firms enjoyed with certain drugs
15 due to patents and so on. Is that security very
16 widespread, or "monopoly", whatever you want to
17 call it? Are there a large number of companies that
18 have that privilege, or way of marketing the product
19 to the exclusion of others?

20 MR. CONDER: I would venture that it is
21 considerably less than applies in the United States.

22 MR. RICE: Considering the number of drugs
23 on the market today and considering the type of drug
24 and the prescription class of drugs, would there be
25 a large number, or could you give us any percentage
26 of those that would be manufactured by a manufacturer
27 that would have this security or monopoly or privilege,
28 whatever you want to call it?

29 MR. CONDER: That would be a very difficult
30



1 question to answer, to be absolutely specific, because
2 you would have to do a complete survey of all products
3 that are on the market and then analyse it from
4 there. But I frankly don't believe that there are
5 any great number of products on the market that one company
6 has a specific control over to the exclusion of
7 of everyone else in respect to the specific sale of
8 medication, for a specific ailment that the drug would
9 be used for.

10 MR. RICE: Should this occur, that a company
11 has that privilege, does it have a tendency then to
12 increase the price to what the traffic will bear
13 of that product?

14 MR. CONDER: There are many things which
15 have to come into the establishing of a price for
16 a company, but generally in this particular case
17 the prime concern would be to determine what form of
18 medication exists on the market to treat this specific
19 ailment which this drug is being brought out for.
20 If there are a number of products which are on the market
21 which have been used in the past, or if it is a brand
22 new type of medication, just coming out, the company
23 bringing out the discovery and producing this particular
24 preparation certainly will have to take into consideration
25 all of the factors, because that is the basis of
26 competition in that respect.

27 MR. RICE: That leads into some questions
28 along brand and generic names. I take it from your
29 brief that the Association advocates the use of brand
30



1 rather than generic names, is that generally correct?

2 MR. CONDER: Actually the brand name as against
3 the generic name controversy as it stands might
4 be generally a misnomer in fact, because all products
5 which are placed on the market carry generic or
6 company names.

7 Our primary point is this, we have merely
8 used that as the reason of explaining the difference
9 which might exist, but basically the main difference
10 is the quality and reputation of the company itself,
11 as Dr. Morrell pointed out.

12 MR. RICE: Would it not have the other effect,
13 that once a brand name has been established, it would
14 tend to give that manufacturer a monopoly or a security
15 or privilege for that particular drug?

16 MR. CONDER: I think we have had examples
17 in the market in recent years where this has not
18 been the case.

19 MR. WHITE: Dr. Dickson says it does.

20 MR. CONDER: I beg your pardon?

21 MR. WHITE: Dr. Dickson says it does. He
22 said the brand name would do that.

23 DR. DIXON: I think if you read the whole
24 paragraph in the brief, it will indicate the
25 primary result is not enhancing the manufacturer's
26 position other than by putting pressure on him to
27 continue to perform in the way that he has in the
28 past.



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2 On Page 33:

3 "In an industry subject to considerable
4 competitive pressure, as the pharmaceutical
5 industry would appear to be, the main contribution
6 of branding would appear to be the putting
7 of pressure on the manufacturer to continually
8 maintain and improve the quality and performance
9 of his product."

10 The discussion of temporary monopoly was
11 in the general discussion back here. That would be
12 my main conclusion with regard to brand names.

13 MR. BRYDEN: Isn't there another aspect, too,
14 that in the possibility of a situation of temporary
15 monopoly, isn't it superfluous as far as he is
16 concerned, to give him a partial monopoly situation
17 permanently, in other words to create an independant
18 identity for his product so that he can create the
19 impression in the medical profession that this is
20 a distinctive product for which there is no real
21 competitor. Isn't that the effect of branding and
22 the purpose of it?

23 DR. DIXON: No, it is to identify the individ-
24 ual product. I think that is true about any branding,
25 it does not make any difference. The main thing
26 is whether it works or not. It is not the brand,
27 it is what the product does and how the medical
28 profession reacts to it. The same is true of a
29 brand of automobile or any other product.

30 MR. BRYDEN: I think what I said applies to



1 other things as well as drugs, too. It does tend
2 to create a partial monopoly situation for the manufact-
3 turer, especially if you can succeed in promoting
4 it as something better, whether or not it is any good.
5

6 DR. DIXON: I personally do not think
7 that would apply. Once again I cannot make any
8 comment about this, not because I do not want to,
9 but because I am not competent to in this case,
10 about the specific workings of the medical practitioners'
11 mind, but it seems to me that performance of the drugs
12 individually -- that a company would have to be
13 on a particular level before any advantage was proven,
14 and conversely if they pulled a boob, so to speak,
15 if they made a mistake, this would work the other
16 way.

17 MR. BRYDEN: He is human. He is open to
18 the same sort of influence as other people in the
19 nature of advertising.

20 DR. DIXON: Carry it further. I do
21 not think a brand can carry any lasting impression
22 on the market unless there is something behind it.

23 That has been the history of any product
24 over the years. In industry you will find that the
25 total package that the manufacturer offers, which
26 means the way in which the product is distributed,
27 the service that is offered, and everything else,
28 the products which consistently do this, are the ones
29 in which the brand is the strongest. The brand alone
30 will not carry its way without anything else behind it.



1 The brand will not contribute anything unique to
2 the situation. It is a way of telegraphing information
3 about the product.

4 For instance if I buy a can of peas, the
5 reason I buy X brand of peas is because I have in
6 the past identified certain characteristics with
7 X brand of peas. If they are bad characteristics,
8 I do not buy it. If they are good, I do buy it.

9 MR. BRYDEN: What you say is probably true,
10 but there is the other side of the coin that if the
11 physician does not try other brands -- and I would be
12 very doubtful if he tries them all -- that it may very
13 well be that there is another brand that is just as
14 good for his purpose and costs less which he knows
15 nothing about because he has been induced by promotion
16 to use a high priced brand which admittedly he
17 found satisfactory, but in the total picture of
18 quality, cost, and everything else, it may not be
19 the best on the market.

20 MR. CONDER: Then you would not have a case
21 of one company having a peculiar use for a specific
22 drug or a peculiar advantage over another, because
23 you would have a competitive effect existing.

24 MR. BRYDEN: A competitive effect may not
25 operate because he may be sold on one brand and may
26 not try the others.

27 DR. DIXON: I would suggest, at least
28 in the picture of this particular industry in Canada,
29 the likelihood of another firm sitting back if they have
30



1 in fact a comparable product, is not particularly
2 high and the physician will be subjected to it.

3 MR. BRYDEN: He will be subjected to pressures
4 from them all.

5 DR. DIXON: Dr. Dixon to pressures from
6 them all, and presumably his only course is to pick
7 that product which appears to perform the best.

8 MR. BRYDEN: Then there is a premium, as
9 I think you mentioned in one section of your brief,
10 in getting there first. The first fellow with
11 a satisfactory product may get the market.

12 DR. DIXON: This is true, but I am also
13 saying this is very rarely going to last any time,
14 because the brand is not the significant factor,
15 it is the performance of the product. It will
16 get you into the market, but it won't keep you there.

17 MR. BRYDEN: If your product is satisfactory.
18 I will agree if the product does not live up to
19 its claims it will be abandoned by the profession,
20 but if it lives up to its claims a quasi monopoly
21 is developed for that brand through promotion.

22 DR. DIXON: : It is possible but I think
23 it is not likely to happen in this particular industry
24 because of the pressure. I do not know.

25 As I say, I have not questioned the physicians
26 on this. There may be some that operate this way.
27 I would say that probably there are enough physicians
28 who do not operate this way that with the manufacturer,
29 the principle of competition and the margin of the firm
30



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has to always be concerned with that. As long as the margin is sufficiently high of physicians who do make very accurate analyses of everything, these are the ones that will not be influenced.



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MR. BRYDEN: If they are not making those analyses, they are influenced without testing the different products?

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THE CHAIRMAN: Why would they? Are you talking about manufacturers?

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MR. BRYDEN: No, I am talking about the doctor. A practising physician. As a matter of fact, what some physicians say about physicians generally indicates they don't, as far as I can make out, and they are probably not able to.

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MR. CONDER: That is probably why a doctor, Mr. Bryden, will depend on the company in which he has greatest reliability.

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MR. BRYDEN: It is still an interesting part of this.

16

17

MR. CONDER: Yes, because that is the only thing the doctor has. The doctor has no scientific equipment available to test medications supplied to him. The only thing he falls back on is his own personal experience and the way specific products have acted upon patients, and when he finds a product which produces the result he desires, he will continue to use that product until a better one comes along.

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MR. BRYDEN: I just raised the question of monopoly, and it seems to me a factor that might have readily created monopoly elements.

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THE CHAIRMAN: Is that a correct use of the word "monopoly"?

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MR. BRYDEN: Monopolistic elements,



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certainly.

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THE CHAIRMAN: I think the record should be clear it should be spelled with a small "m".

5

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MR. BRYDEN: There is no such thing in the world as an absolute -- nothing in the world---

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THE CHAIRMAN: We are not investigating monopolies as I understand it.

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MR. BRYDEN: This was the point that was being raised.

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MR. HUME: I would also like to make reference to something the Committee has already had evidence on: There appears at this time a compulsory licensing provision in our patent laws with respect to the pharmaceutical industry, and that has some tendency to provide protection to the public, along the line Mr. Bryden has been taking.

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MR. BRYDEN: I was talking about possible monopoly effects of branding of products. Not about licences or patents at all. I think that is where it arose, in that line of inquiry.

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DR. DIXON: I think the issue is, the word "monopoly" as Mr. Bryden indicated is a very difficult one. Monopolistic elements is one thing and monopoly is another. The crux of it is in any industry whether or not there appears to be effective competition. This in the last analysis is the only safeguard. As I said, in this industry there is effective competition, but obviously there will be immobilities and ineffectiveness as there is in anything



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else in the market today.

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MR. WREN: Mr. Bryden is interested in your research on this because they are looking around for a new brand-name too.

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--- (Applause)

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MR. BRYDEN: It has been found to be a very useful item in our society. Sometimes valuable and sometimes very destructive.

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MR. RICE: Mr. Conder, has there been any tendency of the members of your Association when they develop a product to attempt to get a brand-name, and secure a brand-name for that product?

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MR. CONDER: They attempt to do that.

MR. RICE: Yes. Is that the tendency?

MR. CONDER: Yes, because it is the only way a company has of bringing out a product and bringing it to the doctors' attention, and ensuring the name of the company stands behind that specific product. Again, you come to the point of reliability.

22

23

MR. RICE: Mr. Chairman, did you say you were going to adjourn at 12.15?

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THE CHAIRMAN: Yes. We will adjourn until 2 o'clock.

--- Luncheon adjournment.



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--- Following luncheon adjournment.

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THE CHAIRMAN: Mr. Rice?

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MR. RICE: Mr. Conder, I would like now to move into the area of quality control and the testing aspect of your brief. At page 49 you pointed out that the cost of control may represent 10 to 15 per cent of the production cost. At page 51 you refer to a survey that apparently was carried out between drugs that are manufactured by those with quality control, and compared them with those that did not have quality control, and I believe there were some 50 per cent of those non-controlled products that would not meet requirements.

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Was there any difference in the price between the manufacturer marketing the product that did not have quality control as compared to the price of those marketing a product with quality control?

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MR. CONDER: In this specific case, I wouldn't know because this was a study undertaken by the Food and Drug Directorate of the Department of National Health, Ottawa. It might be an accepted fact that a company without quality control would certainly realize a saving on its total production costs.

27

28

MR. RICE: And would this saving be reflected in the price of that product?

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MR. CONDER: It is bound to, because that is part of the cost of production.



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MR. WHITE: He could hide under the
umbrella --

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MR. CONDER: I beg your pardon?

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MR. WHITE: The manufacturer without
quality control might very easily hide under the
umbrella of the price of the high-quality product?

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MR. CONDER: Yes, that is correct.

9

MR. WHITE: I wouldn't expect that saving
would be passed on; not necessarily anyway.

11

MR. CONDER: No, that is true. Not
necessarily.

13

MR. RICE: In any event, if that saving
were passed on, it would account for 10 to 15 per cent?

15

MR. CONDER: It would depend on the company
and the type of product it is making.

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MR. RICE: At page 45, you refer to the
testing there. In the second paragraph you state -

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:The hospitals or the retail pharmacies
are not the places to test the effectiveness
and composition of drugs, regardless of the
price." -

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23

and so on. Then you state in the next paragraph -

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"The proper place to test and ensure the
quality of a drug is at its source of

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26

manufacture, during the time it is being made".

27

and then in the next paragraph you again refer to the
position of pharmacists again:

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"The physician and pharmacist do not have

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the complicated equipment necessary to test



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the stability and effectiveness of modern
medicaments."

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Where would be the proper place to have
clinical tests of products?

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MR. CONDER: Clinical testing is another
thing entirely. Clinical testing is part of the
research and developing of the product itself before
that product is produced. When you go into the
production of the product after you have passed clinical
testing, you then go to the production of the goods
and the quality control then applies on the products
which are being sold. Clinical testing invariably
goes into the product before it hits the market.

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MR. RICE: So the effectiveness that you
are referring to there is the effectiveness after
the product is on the market?

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MR. CONDER: Not necessarily. It could
be the effectiveness of the product once it comes off
the lines and reaches the market, and subsequently,
of course.

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MR. RICE: Is not clinical testing the
only way that the effectiveness could be determined

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MR. CONDER: I beg your pardon?

25

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MR. RICE: Is not a clinical test the
only way that effectiveness of any drug could be
determined?

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MR. CONDER: No, it depends a lot.
Clinical test itself is to value that drug as it stands
in order to ensure that there are no bad effects which



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2 might arise from that drug. When that is finished
3 the company then might put that product out. Clinical
4 testing from there on in is not necessarily the end
5 result. From there on in, quality control that is
6 exercised at the point of manufacture, which is the
7 essential element to assure the quality effectiveness
8 of that particular product.

9 MR. RICE: Is there cooperation between
10 the manufacturers and hospitals with regard to clinical
11 testing of their products?

12 MR. CONDER: To the best of my knowledge,
13 there is.

14 MR. RICE: Is there any arrangement with
15 the hospitals in regard to finances in this respect?

16 MR. CONDER: I have not heard of anything
17 to that effect. I would presume it would be up to
18 the individual company to make the arrangements with
19 the hospital or clinicians concerned.

20 THE CHAIRMAN: Do you know if any of the
21 companies are going to declare their individual
22 position on that point?

23 MR. CONDER: I couldn't say, Mr. Chairman.

24 MR. RICE: Another aspect of your brief
25 is in promotion and selling. On page 66 of your brief
26 you pointed out that this may account for 6.5 per cent
27 of the sales, and there you break it down into mailing
28 and sampling. However, I notice detailmen are not
29 included in that 6.5 per cent.

30 Is there any reason why detailmen were left



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2 out of that survey?

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MR. CONDER: No, the attempt here was to try and breakdown what might be termed advertising costs to the company as such.

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MR. RICE: Could you give the Committee any estimate of what detailmen would cost in that regard?

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MR. CONDER: I am sorry, I couldn't, Mr. Rice.

11

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MR. WHITE: How many detailmen would there be in Canada?

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MR. CONDER: I would venture that there would be probably two thousand in all phases of the industry. All companies.

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MR. SUTTON: How many of those two thousand would be graduates of pharmacy?

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MR. CONDER: That, I couldn't say, Mr. Sutton. There would be a considerable number of graduates in pharmacy in there. Some companies require the detailmen to have pharmaceutical or degrees in one of the sciences or to have a pre-med education or something similar to that. Others don't. It depends pretty well on the company policy in that respect.

25

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MR. RICE: I note this is the result of a survey of 33 companies. Could you tell us where those 33 companies fit into the concentration on page 6 of Doctor Dixon's report?

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MR. CONDER: Again, that is a difficult thing to mention, Mr. Rice, because Doctor Dixon's report



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is not for the same period. I would presume it would be the same as the previous ones he discussed in that there would be high companies and medium companies and low companies volume-wise.

MR. RICE: These companies were all members of your Association?

MR. CONDER: Yes, they are.

(Page 1276 follows)



1
2 MR. RICE: Have you ever received any
3 complaints from the Medical Association with
4 regard to promotion programs of manufacturers?

5 MR. CONDER: Yes, we have. We received
6 a criticism about the -- this was a recent one from
7 the Canadian Medical Association concerning direct
8 mail practices of some companies. This would be the
9 mailing out of direct mail pieces. Whether this
10 applies to all companies or not is entirely a different
11 matter because there are some companies that do
12 little or no direct mail. Some companies are
13 heavy users of direct mail and this is one of the
14 problems, as I mentioned in our brief yesterday as
15 we wound up, that the industry is faced with some
16 problems. This is one problem with which we are
17 faced.

18 We, as an Association, cannot take
19 direct action on this, nor indirect as far as that
20 goes, because that interferes with the sales practices
21 of our individual companies.

22 In this case it is left to the discretion
23 of the individual companies. I have heard that quite
24 a few of the companies who may be concerned about
25 this problem are attempting to do something about it.

26 MR. RICE: Dr. Ferguson when he was
27 talking to us on behalf of Connaught Laboratories
28 informed the Committee that their organization did
29 not require much pressure on the medical profession
30



1
2 and investigation and examination of their
3 products. Why would an extensive program be
4 required for commercial manufacturers?.

5 MR. CONDER: Well I wouldn't say
6 it is pressure on the doctors as much as it is an
7 information campaign. You recall also that I
8 believe Dr. Ferguson mentioned that Connaught
9 Laboratories are not concerned as much with synthetic,
10 what they call synthetic drug products as they are
11 with serums and vaccine and with the serums and
12 vaccines in specific cases. While these are
13 specifically one form or type of product which they
14 had sent out, many of them speak, in a case like this,
15 of possibly insulin and Salk Vaccine.

16 MR. RICE: Is there a feeling among the
17 Association that the doctors should have more
18 initiative in learning, or in acquiring the knowledge
19 about new products?

20 MR. CONDER: I feel as an association
21 we should not make any comment on this specific
22 point Mr. Rice. We do believe this: the final say
23 in respect of all medication, regardless of whether
24 we are talking about brand names or generic names,
25 whatever it happens to be, the final say should
26 remain with the doctor because the doctor is the
27 only man who is capable of, by virtue of his training
28 and experience, evaluating what is best for the
29 patient.

30 MR. RICE: Would it not necessarily



1
2 follow from that then that the doctor would be
3 interested on his own initiative to find out about
4 new products?

5 MR. CONDER: Yes sir. Many of them
6 do, but there must be the means of information
7 available for them.

8 MR. RICE: On page 65 you refer again
9 to the direct mail advertising method. Is this method
10 used even after the product is established?

11 MR. CONDER: This would depend primar-
12 ily on the company and on the policy of that company
13 concerned. In some cases it would; in others it
14 might not necessarily. In some cases some companies
15 do no direct mail whatever.

16 MR. RICE: On page 25 of your brief,
17 I want to turn now to profits, I believe the
18 inference there is that the company is continually
19 lowering its prices. Are the prices of drugs coming
20 down at the manufacturing level?

21 MR. CONDER: Yes, as I mentioned in
22 this very brief survey which we did, and for which we
23 have 90 products appended here to show examples of
24 price reduction -- there is another way of looking
25 at it too, over the years the costs have been
26 increasing rapidly to the manufacturer, the same as
27 in any other field of endeavor, and many companies
28 have held the prices of their products at that level
29 rather than increasing them. A number of companies
30 feel as a result of that that this is an indication



1 that they are, in essence, keeping prices down
2 as low as possible by virtue of two things:
3 one is that they do lower prices that we have
4 appended and second that they stock from necessarily
5 increasing pricing.

6
7 MR. RICE: On page 24 of your brief you
8 point out that the average cost of a prescription
9 in 1958 was \$2.78 while in 1959 it was \$2.98. This
10 would show an increase?

11 MR. CONDER: Yes, that is correct.

12 MR. RICE: Can you account for the
13 prices going down at the wholesale level while
14 in fact the average cost of prescriptions is increasing?

15 MR. CONDER: I honestly don't know
16 on that one Mr. Rice. It is difficult, when you say
17 that companies do bring prices down; for example,
18 again we are speaking here of these figures as
19 being at the end prices and we are speaking only on
20 behalf of the products that we represent. There are
21 cost prices too, selling prices at the manufacturers
22 level.

23 Looking at it from that viewpoint,
24 some companies bring out completely new products,
25 might bring out a form of medication, for example,
26 a new form of medication which might be more
27 expensive to produce at a particular stage than
28 products which were used prior to that, and which have
29 become obsolete as a result of this new product.
30 This type of thing would also appear in this



1
2 difference between the 2.78 and 2.98.

3 MR. RICE: Where is the usual market
4 for manufacturers? Do they sell to wholesalers,
5 retailers, institutions?

6 MR. CONDER: It depends a lot on the
7 type of company and how it operates. Some companies
8 supply what you might call direct. They have their
9 own depots across the country. Others work completely
10 through wholesalers. Usually in the large instit-
11 utional purchases or sales, it is usually done
12 direct by the company.

13 MR. RICE: Is the price then varied
14 according to the market to which the product is
15 going? What level it is going?

16 MR. CONDER: It would depend. Certainly
17 there would be a considerable -- not a considerable,
18 there would be a difference in the price of products
19 sold, for example, to a retail store, a retail
20 pharmacy as opposed to products sold to institutions
21 such as a Provincial Government purchasing department.

22 MR. RICE: Could you explain why?
23 What the principle behind it is?

24 MR. CONDER: Generally the products
25 sold to hospitals or institutional buyers are
26 usually supplied in bulk, and it is much less
27 expensive to supply in large bulk than in small
28 size retail containers. For one thing packaging
29 costs on bulk sales are next to nothing; for another,
30



1
2 it is considerably cheaper to distribute one
3 large quantity to a main purchasing centre or
4 thousands of small bottles to retailers from St.
5 John's to Vancouver.

6 In submitting tenders to institutions,
7 the company must take many factors into consideration.
8 Does the company have a large surplus stock of the
9 product on hand or must it make a special production
10 run. Is it a slack period for the company's production
11 in quality control procedures and can this type of
12 order be utilized to keep workers employed and the
13 plant in operation? Again, some companies consider
14 it advisable to get their products into a hospital
15 so that they will be made known to the many doctors
16 who use hospital facilities. Aside from a generality
17 such as that, it would depend primarily on the individ-
18 ual company and its policy in that respect.

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MR. RICE: Do a number of your companies export their products?

MR. CONDER: Abroad, yes, they do.

MR. RICE: Would the export market have an effect on their price also?

MR. CONDER: That would depend primarily on the company and the volume. At the present time the exports from Canada, in this particular field, are not extensive although they have been growing in recent years.

It would depend primarily on the company, the percentage of the exports from the company and what relation it has --- and what relation this might conceivably have on its domestic market. Again, that would depend on the company's overall operation.

MR. TROTTER: Mr. Chairman, possibly on that line where the drug firm may manufacture a drug here in Canada and export the same drug to England is there much difference in prices that you are aware of?

MR. CONDER: I am not aware of anything in the field. Unfortunately I have seen nothing on it. That would come in with the individual pricing of the companies and as an Association we do not touch that area.

MR. TROTTER: If we want to get into the question then of the difference in price of say the drug made in Canada, sold in Canada



1
2 and the same exported to England -- in many
3 cases there has been a great difference in price --
4 the only way we could get into the question would
5 be directly from the actual drug firms themselves?

6 MR. CONDER: Yes, that is correct..

7 THE CHAIRMAN: So you do not know
8 anything about imports or exports or pricing in
9 that field, is that right Mr. Conder?

10 MR. CONDER: Not concerning pricing
11 in that respect whatever. Nothing whatever.

12 MR. RICE: On page 55 of your brief
13 you point out that service products are sometimes
14 manufactured by a company even at a loss. Could
15 you give us some examples of these service
16 products?

17 MR. CONDER: Yes, I mentioned three
18 at the time in the presentation. I just had another
19 one but I haven't it here with me. These general
20 service products -- I mentioned this case of the
21 Saskatchewan boy bitten by a snake. This was very
22 rare, but these things happen, and this R.C.M.P.
23 constable who contracted cryptococcus neoformans .
24 This other company that produces ion exchange resin
25 and there is one here I had, this may fall within this
26 category. This is a newspaper article that appeared
27 in an Ontario paper just recently. It said this:
28 it was commenting on the Alliston detachment of the
29 Ontario Provincial Police were recently instrumental
30 in rushing an urgent shipment of a specific drug



1
2 from a company up in the Alliston area to Niagara
3 Falls and they just pointed that within
4 20 minutes from the time the hospital called the
5 Provincial Police officer, the case containing
6 this drug was en route by a police cruiser directly
7 to the Niagara Falls hospital. It was an emergency
8 treatment which required a drug used as a decompress-
9 ant for operation on the cranium resulting from
10 accident and other areas. Many companies have this
11 type of product. As in this case of the ion exchange
12 resin, this resulted from a research program whereby
13 the company invested a considerable amount of money
14 in order to find a specific substance and this
15 particular research program failed but as a by-
16 product of the research program they found this
17 particular drug and made it available as it was
18 required.

19 MR. RICE: Would the service products
20 form a large amount or small portion of the cost
21 of the manufacturer?

22 MR. CONDER: No, I would say they would
23 form a small portion of the cost because by their
24 very nature they are more of a service product to
25 help an ailment or a problem which occurs very
26 very rarely, and which we would have very few
27 Canadians contracting this particular ailment
28 in the course of a year. As a result, it isn't what
29 you might term as a mass production item. Never-



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theless, the cost of this thing has to be apportioned against the company's products in other lines. It isn't great but it is a factor.



1 MR. RICE: Could these services not be
2 considered public relations?

3 MR. CONDER: Well that would be a debatable
4 point. Some companies might consider them that,
5 others might not.

6 MR. RICE: Mr. Conder, a few questions about
7 your association of 54 members. Could you tell the
8 Committee of the 54 members, how many are foreign
9 owned?

10 MR. CONDER: Yes sir, our membership is
11 broken down as I mentioned earlier into full members
12 and part members. The full members are the ones
13 which have complete voting rights. They are all
14 companies which manufacture and distribute in Canada.
15 In breaking these down I take it it should be broken
16 down on the basis of the full members who have full
17 voting rights within our association:

18 Canadian Financed, 30 per cent

19 United States Financed, 49 per cent

20 United Kingdom Financed, 9 per cent

21 European Financed, 12 per cent

22 THE CHAIRMAN: Would that represent the same
23 proportion of contributions, not within the company
24 but by companies of the contribution of the industry
25 to research? In other words for the United Kingdom
26 company, would it do all of its research in the
27 United Kingdom?

28 MR. CONDER: It is possible, although a
29 United Kingdom company might conceivably do research
30



1 in Canada as well.

2 THE CHAIRMAN: To what extent?

3 MR. CONDER: It would depend a lot on the
4 company.

5 THE CHAIRMAN: Do you have an answer to that?

6 MR. CONDER: Pardon?

7 THE CHAIRMAN: Do you have any answer or
8 do you not?

9 MR. CONDER: I honestly don't know.

10 THE CHAIRMAN: What about the United States
11 companies?

12 MR. CONDER: United States companies, I would
13 venture in most of these foreign controlled companies
14 the majority of the research would be done outside of
15 Canada, primarily for this reason, that if you have
16 a company in the United States with a research plant
17 that costs several million dollars to build, and
18 the cost of operating that research plant comes
19 to three million dollars a year, and you have in Canada
20 a company which is a subsidiary of that firm which
21 has total sales of probably \$750,000 to one million
22 dollars per year, it is inconceivable that the
23 Canadian company could support a research activity
24 to any great extent.

25 As a result, any work that it would do
26 would be a duplication of what is being done in the
27 United States research facilities, and with facilities
28 which incidentally have considerably more to offer
29 than would a very small proportion of the Canadian
30



1 operation. This was particularly true about five
2 years ago, and we have noticed that since then a
3 considerable increase, first of all, has been made
4 in clinical investigation.

5 THE CHAIRMAN: Then it would seem that irrespec-
6 tive of the amount of drugs, of the national or pro-
7 vincial drug bill, whatever it might be, that the
8 only companies that are making a solid contribution
9 to research in Canada are Canadian owned companies.

10 MR. CONDER: No sir, we have a number of
11 foreign controlled corporations which do research
12 in Canada. As a matter of fact there is a company --

13 THE CHAIRMAN: Just a moment, that is what
14 I am after. What information have you, Mr. Conder,
15 or any of the men here? Would any of you care to
16 answer on that point?

17 MR. HUME: I do not know, but we could try
18 and get you the answer. It is my understanding --

19 THE CHAIRMAN: Before you leave that, let
20 me ask you one question. Is it your intention that
21 the answers in connection with this brief are all
22 to be answered by Mr. Conder, Professor Dixon and
23 yourself?

24 MR. HUME: Yes.

25 THE CHAIRMAN: There is to be no operating
26 management making a statement?

27 MR. HUME: I am just representing the Associa-
28 tion here. The companies are not here today, and if
29 there are any gentlemen in the audience that are listening
30



1 they can speak for themselves.

2 THE CHAIRMAN: Well then, the Association
3 is not bringing evidence in support directly from
4 its members?

5 MR. HUME: No sir. If there is any question
6 that the Association -- any answer that the Association
7 can get for you, I suppose basically all the information
8 is to come from the members.

9 THE CHAIRMAN: I do not know.

10 MR. HUME: On this question of research --

11 THE CHAIRMAN: You are putting an almost
12 intolerable burden on Mr. Conder.

13 MR. HUME: Well, he has got broad shoulders.

14 THE CHAIRMAN: That's not the point.

15 MR. HUME: It all depends on the information
16 you want. If you ask a question which Mr. Conder
17 cannot answer he can either say, "I don't know", or
18 he can say "I do not know but I will try and find out."
19 That is what we are proposing to do as far as we
20 are able.

21 THE CHAIRMAN: Maybe this is a good point
22 to ask this question: in support of your Association's
23 brief, you there any Canadian manufacturers who
24 are submitting briefs?

25 MR. HUME: If there are, I have not heard
26 of it. I cannot answer the question. I do not
27 know.

28 THE CHAIRMAN: Have you enquired?

29 MR. HUME: No, I have not. I know there
30



1 are Canadian manufacturers who have had counsel and
2 who are following these proceedings, but as to
3 their intention, I have no idea.

4 THE CHAIRMAN: Where could we ascertain
5 that information?

6 MR. HUME: I will attempt to find out. We
7 will ask the members of our Association whether they
8 intend to file briefs and let the Committee know,
9 but we have not done so and we will certainly find
10 out. I have not enquired.

11 THE CHAIRMAN: I am sure you appreciate the
12 point I am getting at. I think we are entitled to
13 know what your intentions are.

14 If it is not clear from our earlier hearings,
15 unfortunately all of the people here have not been
16 present at the earlier hearings, but some of you
17 have. I think we should know what the general
18 intention is, if for no other reason than our own
19 convenience.

20 MR. HUME: As to our intention, I am
21 representing the incorporated association and my
22 intention may not have been clear in the past but it
23 is to plan to be here as we have been for the last
24 two days.

25 As to whether or not our members in their
26 individual activities intend to come before this
27 Committee, that is something I have no idea about
28 but I will enquire and try and find out if it is of
29 interest to the Committee.
30



1 I don't want to leave the question of
2 research as it is on the record and get it buried
3 in something else.

4 My instructions are, and if I am incorrect
5 I will correct it at a later date, that while research
6 may be done in the United Kingdom or in the United
7 States, Canadian manufacturers contribute to that
8 research as part of the organization. While the
9 research may not be done it is paid for in part
10 in proportion to the Canadian sales.

11 THE CHAIRMAN: So that Canadian operations
12 would be then subsidizing the research outside of
13 the country?

14 MR. HUME: "Subsidizing" is perhaps not
15 the word I would use. They are paying their
16 fair share of the general companies' world-wide
17 research.

18 THE CHAIRMAN: Excuse me for a moment, the
19 actual research is being conducted outside the country?

20 MR. HUME: In some cases, as Mr. Conder
21 has indicated.

22 THE CHAIRMAN: In some cases, many or few?

23 MR. HUME: Mr. Conder has the information,
24 if anybody has it at all. I understand most of it
25 is done outside and some of it here.

26 THE CHAIRMAN: The other day, some considerable
27 time was spent with a very able and well informed
28 witness on the question of a national or provincial
29 factor involved in this subject, that of self-sufficiency.
30



1 There may be a point that if we have to be self-
2 sufficient, maybe the cost of drugs should be higher
3 in this country. Who knows?

4 You see, Mr. Hume, no one is charged with
5 anything before this Committee. We are here to find
6 facts.

7 MR. HUME: That is true.

8 THE CHAIRMAN: I think it is of some interest
9 to this Committee to know whether or not and to what
10 extent the research is being carried on in this
11 country by those firms doing business in this country.

12 When I use the word "country" I am speaking
13 of Ontario and directing it in the same sense I
14 did this morning. I must of necessity talk about
15 Ontario, but if the subject can only be dealt with
16 on a national basis, I will still ask the question.

17 MR. BRYDEN: At this point, Mr. Chairman,
18 I have some doubt in my mind about figures that appear
19 on Page 41 towards the top of the page relating to
20 research and to the companies covered by the survey.

21 It is divided into two parts, A and B.

22 "A. Total amount actually spent in Canada.

23 1959 -\$2,500,165.

24 B. Total amount spent by foreign control
25 on behalf of Canadian subsidiaries.

26 1959 -\$2,614,900."

27 Is that a breakdown of what we were talking
28 about, or does that relate to something else?

29 MR. CONDER: No, I believe you are correct
30



1 in that respect. This gives you the breakdown amongst
2 these 22 companies of the amount that is actually
3 spent in Canada and the amount that has been spent
4 by foreign control on behalf of the Canadian subsidiaries.

5 MR. BRYDEN: But that item be will be
6 the amount that the Canadian subsidiaries contributed
7 to their parent companies for research, will it?

8 MR. CONDER: That is correct, yes.

9 MR. BRYDEN: And that might be just for the
10 general research of the company, or I presume there
11 could be some specific problems where they might ask
12 for information.

13 MR. CONDER: That would come under technical
14 advice or technical assistance which would be another
15 thing entirely. This would be allocation for
16 research.

17 MR. BRYDEN: This would be an amount that
18 would be levied against them for the total research
19 over all the companies.

20 MR. CONDER: For their share of the products
21 they are marketing.

22 MR. WHITE: That is for the 22 companies only
23 you mentioned?

24 MR. CONDER: For the 22 companies only.

25 MR. HUME: About the question of self-sufficiency
26 is it my interpretation of your point that it would
27 be in your view desirable, or more desirable -- would
28 you say it would be more desirable that a foreign
29 company that had established a subsidiary in Canada
30



1 should do more of its research in Canada and less
2 at its own laboratories.

3 THE CHAIRMAN: I did not say that, Mr. Hume.
4 I am simply asking the question as to where the
5 research money is spent by these companies doing
6 business in Canada, and that is as far as I have gone.

7 MR. HUME: You went on and said this comes
8 to a question of self-sufficiency.

9 THE CHAIRMAN: I did. Let me finish please.
10 That is the extent of my question and I cannot tell
11 where we go after that question until I have the answer.
12 I did say that with a view to trying to help you,
13 because you were elsewhere the other day, by
14 referring to some other proceedings before this
15 Committee in which this subject was discussed and
16 probably the most accurate reference to what we are
17 talking about would be in the transcript. I say
18 that kindly.

19 Penicillin, for instance, Mr. Hume, was
20 discussed the other day and it was pointed out that
21 it is probably one of the most important drugs or
22 chemicals or whatever it is in this country, particularly
23 in the state of war or national emergency. It
24 was pointed out of three producing plants that
25 formerly existed, none now exist, and that the
26 raw materials to manufacture and finish off penicillin
27 for distribution in this country now, all of those
28 sources are in other countries, and it was around
29 that subject --
30



1 MR.HUME: It was because of the cost,the
2 high cost.

3 THE CHAIRMAN: Whatever it may be, yes.

4 MR. CONDER: You recall my mentioning earlier --

5 THE CHAIRMAN: Please let me finish with
6 Mr. Hume. It was around that point that we were
7 discussing the matter and it was from that point,
8 and I want to make my position clear, that a question
9 of provincial self-sufficiency, if I may, or national
10 self-sufficiency, must necessarily be of interest,
11 because it could be -- I do not know -- it could be
12 that the cost of drugs in this country is too low.
13 I do not know, maybe it is too high. Maybe the
14 price is right. We are in no position today to make
15 any statement along those lines.

16 What I am trying to get at is in determining
17 that position there are some collateral aspects
18 which I would think this Committee will take into
19 account.

20 MR.HUME: I do think, Mr. Chairman, it fol-
21 lows: from that, if more and more research were done
22 here, the cost of drugs would probably go up.

23 THE CHAIRMAN: Have you any evidence that
24 that effect?

25 MR. HUME: No, just that it seems to follow
26 if a company has to establish a laboratory, their
27 cost, as Mr. Conder said, of several million dollars
28 for a laboratory to have self-sufficiency in Canada, it
29 would seem to follow it would therefore add to the cost
30



1 of the product.

2 THE CHAIRMAN: It could very well be. If
3 you have any evidence on that point to support those
4 statements, I would think we would be interested
5 in them.

6 MR. HUME: I do not know if Mr. Conder
7 can answer, if he has any evidence in the Association?

8 MR. CONDER: Probably the evidence might
9 be briefly this, it is a general viewpoint of the
10 research picture as it applies to any industry
11 that first of all you must have a fairly sizable
12 organization before you can go into research in any
13 manner whatever.

14 We say here that of these 22 companies,
15 and there were some foreign subsidiaries as well
16 as our own Canadian companies the amount of research
17 and development in Canada in 1959 of \$2,500,000,
18 was an increase of 12 per cent over the previous
19 year. As we go along and as the market for pharmaceutical
20 develops in Canada, and as the overall population
21 increases, I would think these companies will become
22 increasingly more able and capable of undertaking
23 research programs, because the money required for
24 the research in the long run -- it is difficult
25 to do it in a small market such as we have now, but
26 some companies are doing it and there is a trend
27 towards that.

28 THE CHAIRMAN: Do you think we are hewers
29 of wood and carriers of water for the time being?
30



1 MR.CONDER: No, by virtue of the size of
2 our population we are making a step in this direction
3 and we are getting there. Within ten or fifteen
4 years time we will be in a better position than
5 we are in now in this field. We are in this state
6 of transition. Five years ago in Canada there was
7 some, not too much, clinical investigation work
8 being done on products which were developed in other
9 countries. Today most of the major companies conduct
10 simultaneous clinical investigation studies in
11 Canada at the same time as these products are
12 being tested in the United States.

13 Clinical investigation is not a large part
14 of the research and development picture, but it is
15 something.

16 MR. BRYDEN: Connaught Laboratories last
17 year, according to the figure I have, spent \$815,000
18 for research as well as \$2,500,000 for the 22 companies.
19 Have you any explanation as to that?
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23 (Page 1300 follows)
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MR. CONDER: I would venture that

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Connaught Laboratories have annual sales that would
be superior to the majority of these 22 companies.

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MR. BRYDEN: Do you mean ----

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MR. CONDER: Not all of them.

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THE CHAIRMAN: In the spirit in which we
are talking, just take a figure that you think that
their sales would be justified.

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MR. CONDER: I venture they would be
around five million dollars.

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THE CHAIRMAN: I think that is about the
figure, is it not?

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MR. BRYDEN: I don't recall.

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MR. CONDER: In our particular industry
a five million dollar company is a large company.

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THE CHAIRMAN: How many five million dollar
companies are there in this Association?

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MR. CONDER: That is a difficult thing
to say off hand. Probably about seven.

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THE CHAIRMAN: We are on the horns of a
dilemma, Mr. Hume, ---

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23

MR. HUME: I'm sorry?

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THE CHAIRMAN: We are on the horns of a
bit of a dilemma. This is not a contest between two
adversaries or any adversaries, but I think there is
some basic information that must be well known or
patently known to your Association and which should be
available to us, because as I understand it, your
Association is before the Committee speaking for the

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majority of the Canadian Pharmaceutical Manufacturers.

MR. HUME: Dollar-wise. 54 of 200.

THE CHAIRMAN: A very important segment .
So therefore, in looking to them -- I will probably
want to think this matter over overnight before I
express myself further, but it may be that you will get
the point I am trying to make.

MR. HUME: I would like to make this
particular point: This Association has had a specific
request made of it and has come forward with what it hoped
would be generally informative. We can't go into
matters of price, discounts, exports, values, cost
ingredients. Those are matters that each individual
company works out for itself, and this Association
-- it would be from my point of view contrary to the
Combines law to engage in that sort of activity.

THE CHAIRMAN: To present a brief with
specific detail?

MR. HUME: I beg your pardon?

THE CHAIRMAN: To present a brief with
specific detail?

MR. HUME: No, I say if this Association
had sought price information, discount information,
-- after all this would be made up by members
who sit around a table, and they would be conducting
in my view an activity which is dangerous, so this
Association ---

THE CHAIRMAN: It might have been a very
good excuse -- this Committee might have been a very



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good vehicle for getting that kind of information.

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MR. HUME: With respect, I don't think it is a defence under the criminal law to say we were getting out information because we wanted to make a voluntary statement to a Select Committee.

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MR. WHITE: Many of us acquire information through independent chartered accountants not unlike the profit and loss statements you have prepared, but in much greater detail. This is far from being ---

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MR. HUME: In effect, what you are saying, you are criticising the fact we did not go far enough and this may be a valid criticism.

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THE CHAIRMAN: Let's eliminate the word "criticism" entirely.

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MR. HUME: Criticism with a small "c"

THE CHAIRMAN: I think we are taking advantage of this opportunity this afternoon to discuss where we are going, and how far the Association is going with it. Mr. Wren commented to me a moment ago that maybe we had the wrong body before us in the sense that he could not define the objectives.

23

24

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MR. HUME: Well, of course, you may have the wrong body. It depends on what you want to know. As far as the Association is concerned, I submit it is not the wrong body with respect to the general picture of the industry in Canada.

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When you get down to prices and price spreads and selling techniques and distribution, these are matters that if you want that information with respect



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I think you have got to go to the people who do that sort of thing. Make up a questionnaire if you like and send it out to these companies and seek your information that way, but the Association has not -- with respect I think it should not go into that field.

THE CHAIRMAN: Well, it is probable -- we are not talking about details; we are not talking about what is involved in it. There are eleven members of the Committee, and I, as Chairman, am forced from time to time to speak for them. So I will go back to what I said a few moments ago; I think it is important for us to know some simple facts about the case such as are there any other briefs being submitted by individual companies in support of the Association brief, or separately, having to do with your membership?

MR. HUME: I have answered that question by saying I don't know and we haven't inquired.

THE CHAIRMAN: Then your answer must be "no"?

MR. HUME: I have said so. You asked me whether I inquired, and I say, no, I didn't.

THE CHAIRMAN: We can go on from there.

MR. TROTTER: Could I ask one question of you, Mr. Chairman, and perhaps the witness here could help us. If we are going to get the price of drugs, I would suggest that the only way we will find out is from the companies themselves?

THE CHAIRMAN: Yes.

MR. TROTTER: What I had in mind was this:



1
2 So often we are told -- we have been told by various
3 witnesses that the great differences in the price of
4 drugs in our country and in others is that it is the
5 lack of quality control and such things as that,
6 which might be correct, but there are instances on
7 record where the same brand name, the same company,
8 and the same goods, and same drugs have been selling
9 one hundred tablets for \$7.53 in England, and one
10 hundred tablets of the very same thing in Toronto for
11 \$20.80.

12 THE CHAIRMAN: Of the same manufacture?

13 MR. TROTTER: Exactly the same.

14 MR. BRYDEN: (Inaudible)

15 MR. TROTTER: Well, there are a number of
16 instances of that type on record that have come out
17 in other investigations where Canada has been mentioned, a
18 this very jurisdiction, which we are in, and the only
19 way I feel that we will get an answer is to bring in
20 representatives of these companies that produced these
21 goods. I hope we will be able to do that.

22 MR. BRYDEN: I hope we will be able to
23 get them here.

24 THE CHAIRMAN: This is outside the ambit
25 of this Association's brief obviously, Mr. Trotter.

26 MR. TROTTER: I see that.

27 MR. WREN: Yes, but Mr. Chairman, the
28 difficulty here is this: That the Association, without
29 studying its objectives or purpose, leaves me -- at
30 least it leaves me in the dark and one might be accused



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from time to time of engaging in what is termed a witch hunt, but I personally feel it would be grossly unfair to bring individual companies before this Committee and have them reveal all their secrets and trade methods, whereas possibly your Association or the members of your Association, by assisting you, would give us the information we need without having to pinpoint particular firms and individuals.

It just stands to reason we are going to have to get this information. At least it is not conceivable with our recourses we can examine 212 individual companies so that if we have to get it that way it is going to fall on the heads of one or two individual companies and I don't think it would be fair to do that. If you could bring expert witnesses along with you and briefs to support your brief to avoid what could conceivably happen to them. Do you get my point? We are in a position here where if you cannot answer the questions and your counsel can't answer the questions-----

MR. CONDER: Yes.

MR. HUME: We are in this position, when we sent out the questionnaire trying to get assistance for this Committee, we got less than 50 per cent replying to it. Even if we could get the assistance of one or two, it would not be representative.

MR. WREN: I would respectfully suggest to your members they are perhaps not conscious of the great public interest in this question, and if they are



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2 not willing to cooperate with your Association they
3 might be doing themselves some harm.

4 MR. HUME: This may be.

5 MR. CONDER: We would be glad to help in
6 any way possible with one exception, and this is a
7 point in which your Committee is extremely interested,
8 and this is prices and discounts, and which, traditionally
9 as a trade association, we are always suspect by
10 investigation people. As a result, we have laid down
11 in our Association over the years, on advice of legal
12 counsel, that we shall not discuss or consider prices
13 or trade practices in any manner whatever, and it is
14 done particularly for this legislation which is on
15 the books now.

16 MR. BRYDEN: I wonder if the Association
17 might possibly be able to help us and still avoid the
18 difficulties you are speaking about if it requests
19 some of its members to send certain information direct
20 to us. For example, I am interested in price history
21 of various brand drugs. From what has happened in the
22 United States; it certainly would be very interesting
23 what has happened there -- I don't know if the same
24 thing has happened here -- there are about five
25 companies in that field. I have no doubt they are
26 all members of your Association, but would it be
27 possible for you, merely having a closer contact with
28 them than we have, to ask them if they would submit
29 that and such other price information as we may decide
30 we want directly?



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MR. CONDER: We would be glad to, Mr.

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Bryden, if it is the wish of the Committee for us to

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do so, to pass this information over to our companies

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and ask them to forward information to you direct.

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THE CHAIRMAN: We don't want to make this

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impose an undue burden on your Association or anybody,

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and any added expense, if there is any expense to be

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involved, I think the Committee should bear it.

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Let me put this to you, Mr. Hume, directly:

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In my very limited experience, possibly by hearsay.

12

there are trade associations, many of them in this

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country, who have officers as you do. Those officers

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usually come forward and are able to state without

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violating any confidential aspect of their own firm's

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position or anything that would indeed involve their

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competitors, information along those lines, where they

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are able to say I have been in the business for thirty

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years. The general practice on this point in our

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industry is thus and so. It just happens that our

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company doesn't do it. He makes that statement, or

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our company doesn't believe in that, but the general

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practice is such and such. That is what we are

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talking about.

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MR. HUME: Let me say this ---

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THE CHAIRMAN: And there is no breach of

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confidence.

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MR. HUME: Let me say this: In the

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recent amendments to the Combines Act, I persuaded

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two representatives of companies to come with me, with



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the trade association, and submit views to the Select Committee of the House of Parliament on this question, assuring them they would be there in their capacity as an association, and the record of the proceedings will show that immediately they got there they were identified with a company and they were hammered with questions, "Why do you sell your product at this price?", and that is the sort of thing that keeps people away from a party like this. The members are afraid, and that is the difficulty that all trade associations have.

THE CHAIRMAN: I can only answer that this way: This question of committee work -- if that is what you are talking about -- in this province has been the subject of some very serious consideration over the past two or three years, and in any committee with which I have been connected there has never been any abuse because I have never permitted it. I know of no example during this hearing where any witness has been forced to expose evidence against his will without a fair consideration of fact.

I would hope that it might be the conclusion of everybody that the hearings of this Committee have been on a very fair basis, and in an atmosphere conducive to ascertaining the real facts to enable the Committee to bring in a fair, comprehensive and intelligent report.



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2 MR. HUME: That should be very
3 reassuring, Mr. Chairman.

4 THE CHAIRMAN: I would hope we never
5 had to make that reassurance Mr. Hume.

6 MR. HUME: I am just reporting as to
7 what has happened in other places and this is the
8 sort of thing when you try to persuade a company
9 representative to come forward, he says well am
10 I likely to be asked questions dealing with my
11 company's discount practices, and the answer is yes
12 you are likely to because it is possible -- it
13 isn't according to the law, there is no question
14 of relevancy and this is one of the problems of
15 getting witnesses to come forward. I think this is
16 something that has to be accepted.

17 MR. BRYDEN: Mr. Chairman, would it
18 be true that if some of these companies were before
19 this Committee, we might in some cases want to
20 enquire of them, to explain an apparent price
21 discrepancy such as Mr. Trotter mentioned, such
22 as I mentioned on drugs, a major drug for the
23 treatment of mental illness--it seems to me some
24 of those discrepancies require explanations.

25 If there is a good explanation why
26 wouldn't the companies come forward and give it
27 to us? Why would they be embarrassed if you want to
28 know? I certainly do not see why, on the face of it
29 a major drug in our mental hospitals sells and is
30 sold in Toronto by one subsidiary of Poulenc



1 and Company, Smith Klein in the United States and
2 sold in France by another subsidiary of the same
3 company under exactly the same brand name , why there
4 should be such a tremendous difference in price.
5

6 THE CHAIRMAN: Let's put the matter,
7 and with respect, let's put that in simple language
8 that there is a difference in price of the same
9 product in different jurisdictions and the Committee
10 will be interested in hearing the explanation.
11 I think that is a proper question. I think that is
12 proper material for the Committee to request.

13 MR. HUME: And this, as I understand
14 Mr. Chairman, is the first time that such a specific
15 question has come up with the Committee? It will
16 appear in the record and they will read it for the
17 first time?

18 THE CHAIRMAN: No, it has been raised.
19 Mr. Trotter has raised this example before some days
20 ago.

21 MR. HUME: It is fairly recently, I
22 mean?

23 THE CHAIRMAN: In the Fall.

24 MR. HUME: After this was prepared?
25 That is my point.

26 THE CHAIRMAN: I don't know when this
27 was prepared. Mr. Trotter's question and observations
28 were made in the Fall sittings of this Committee.

29 What we are trying to do, we are
30 taking a few minutes out here to see where we are



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2 going as much, I would hope your interest as
3 ours, to find a common solution. I will be quite
4 frank. It has been my hope that, having in mind
5 that the people we are concerned with before
6 this Committee are all professional people:
7 doctors, some lawyers, dentists, druggists every-
8 body -- this is an unusual characteristic -- it
9 has always been my hope that the basic evidence and
10 the detail in support thereof would flow gently
11 forward to the Committee of its own volition and that
12 no other resort of any kind would be required.

13 I am trying to chose my language to
14 reflect the spirit on which I make these
15 observations. Now can I put it to you any more
16 gently?

17 MR. HUME: No sir. If you are speaking
18 to me as an individual, I can wholeheartedly agree
19 with this whole approach and so on, but as I say,
20 my instructions are limited today. I cannot speak
21 for companies whom I do not represent, and I do not
22 know whether they intend to come forward until they
23 are compelled to or whether they will hear your words
24 today and come forward voluntarily when you resume
25 again next Spring.

26 THE CHAIRMAN: Let's take a 5 minute
27 recess to enable you to consult without any
28 appearance of making any statement at all; just to
29 assist you.

30 MR. HUME: I don't know who I am going



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2 to consult with. They are not here. I will consult
3 with a few that are here. There are 54.

4 THE CHAIRMAN: I won't make any comment
5 at the moment Mr. Hume.

6
7 ---Short recess

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9 THE CHAIRMAN: I have a suggestion
10 to make. I gather it maybe difficult for Mr. Hume,
11 in the short period of time, to secure instructions
12 from his principal and its members, and it also
13 follows that the Committee thinks that the point
14 may be technically well taken.

15 With respect to the Association's
16 presentation, at the very outset we must tell you
17 that we think that the brief -- you are to be
18 complimented on the brief, because a great deal of
19 work and effort has gone into it and by the same
20 token, we do not want to do or say anything that
21 would take away from the very excellent presentation
22 which has been made so far, and at the moment, the
23 Committee is prepared to accept your statements
24 that as an Association perhaps it should be treated
25 in that sense and in that presentation by the
26 officers or professional officers of the Association
27 on the one hand and by the economist who has been
28 retained on the other and also on the third hand,
29 through the good offices of the counsel who has
30



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2 been retained and we shall proceed on that basis,
3 and if as and when the Committee requires specific
4 information then we will take whatever steps
5 are indicated to secure it.

6 MR. HUME: Thank you Mr. Chairman.
7 I will just add there, when you decide if as and when
8 the information may be required, and if you let us
9 know, we will do everything we possibly can to secure
10 the information for the Committee.

11 THE CHAIRMAN: You mean with respect
12 to your Association.

13 MR. HUME: With respect to our
14 Association.

15 THE CHAIRMAN: But with respect to
16 any individual companies, we will govern ourselves
17 accordingly.

18 MR. HUME: Yes, but I am offering sir
19 that even with respect to individual companies
20 if there is information that we can assist you in
21 getting we will do everything we can to assist.

22 THE CHAIRMAN: Fine thank you. Mr. Bryden
23 you had something you wanted to observe.

24 MR. BRYDEN: Yes Mr. Chairman, with
25 respect to the drug largactil which I was speaking
26 about prior to adjournment, Mr. Conder during the
27 recess called my attention to the fact that the
28 company that produces and markets that drug is
29 not a member of the Canadian Pharmaceutical Association
30



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2 so in case I gave the impression, as I may have
3 done, that it was a member of the Association,
4 I would like the record to be corrected on that
5 point.

6 THE CHAIRMAN: Do you know what
7 company does manufacture it? You might as well
8 start right in.

9 MR. BRYDEN: I know which company
10 it is marketed by and what company holds the
11 patent. The patent is held by a French company,
12 Poulenc and it is marketed in this country by
13 a subsidiary of that company which I think is
14 called Poulenc. Its head office is somewhere in
15 Quebec, I think in Montreal.

16 I would like sometime to find out
17 more about that particular drug but obviously this
18 Association won't be able to help me on that.

19 THE CHAIRMAN: Now Mr. Fullerton
20 had an observation he wished to make.

21 MR. FULLERTON: Yes Mr. Chairman. I
22 would like to ask Mr. Conder, referring to page
23 17 of your report, the second paragraph: "funeral
24 director's fees embalming services and casket alone
25 average \$700 -- \$750 in the Toronto area and this
26 does not include the monument or plot of ground."
27 Would you tell me where you got that information?

28 MR. CONDER: Yes, we got it from the
29 office through a call to Canadian Funeral Services.
30



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2 MR. FULLERTON: Do you know to
3 whom you were speaking at Canadian Funeral
4 Services?

5 MR. CONDER: No, I am sorry. I
6 didn't do it myself. That phone call was placed
7 by my executive assistant.

8 MT. FULLERTON I wonder if you could
9 get me the names of the person you spoke to there?

10 MR. CONDER: Would you like me to do
11 it right now?

12 MR. FULLERTON: No.

13 MR. CONDER: I will get it and supply
14 it later.

15 MR. FULLERTON: This information I
16 have with me, I got from the Canadian Funeral
17 Services myself this morning. That is a report
18 from the Dominion Bureau of Statistics, 1956. Now
19 there has been no appreciable increase in the cost
20 of funerals since 1956. Being a funeral director
21 myself, I can make this statement.

22 THE CHAIRMAN: Do you have any figures?
23 If the figure is wrong, do you know what it should be?

24 MR. FULLERTON: Yes, taking the total
25 number of deaths in 1956 the figure was 132,470.

26 MR. HUME: Is that all Canada or Toronto?

27 MR. FULLERTON: In Canada.

28 MR. HUME: This reference is to the
29 Toronto area.

30 MR. FULLERTON: I just wanted to compare



1
2 this figure. The total cost in Canada of funerals
3 amounted to \$45,594,820. That represents approximately
4 one third of the cost of drugs in a year in Canada.

5 What bothers me was your inference
6 that it cost -- the high cost of dying, as compared
7 with the cost of drugs. The cost of funerals in
8 the Toronto area alone is \$495. That is the average
9 cost of a funeral.

10 According to this report, across
11 Canada during the same year the cost was \$405.
12 That is per adult funeral. I wanted to mention this
13 to set the record straight and I wondered if you
14 could verify your information.

15 I would like to now make a further
16 statement for the record.

17 MR. CONDER: I am sorry, are you
18 finished Mr. Fullerton?

19 MR. FULLERTON: I would like to file
20 this with the Committee Mr. Chairman.

21 THE CHAIRMAN: What is it now? Mr.
22 Fullerton wishes to file a report of the Dominion
23 Bureau of Statistics with respect to funeral
24 directors, 1956, and for identification purposes,
25 bears number at the lower left-hand corner 6515-508-
26 126 to which is attached a yellow sheet of figures.
27 This is a matter of principle I take it?

28 MR. FULLERTON: Yes.

29 MR. CONDER: Mr. Fullerton, if I
30 may please I would like to say that there was



1 absolutely no -- I will accept your figures precisely
2 as they stand now sir. There was no intention
3 whatever on my part, and I say that because I put
4 this material in myself, there was no intention
5 whatever to accuse the Funeral Services in the
6 Toronto area of being exorbitant in any sense
7 whatever.
8

9 I would presume that possibly they,
10 as in any other field of endeavor, have not gone
11 out of line with a standard cost of living, It was
12 put in merely to point out this view, that at one
13 time, in talking of figures, it cost this much
14 for a person who had pneumonia to get better. It
15 cost that much.

16 I was merely using it as a ratio of
17 showing that the cost of having pneumonia has dropped
18 to about \$15 as a result of the new products now
19 out, but I can certainly assure you sir there was
20 no intention whatever on my part, or our part to
21 accuse the Canadian Funeral Services in any manner
22 whatever.
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26 Page 1321 follows...
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1 MR. FULLERTON: It was just that your
2 figure was so much out of line I can't let it go
3 on the record.

4 THE CHAIRMAN: It is a long way to Thessalon.

5 MR. WREN: The high cost of real estate in
6 Toronto, they were probably talking about the plot.

7 THE CHAIRMAN: Mr. Rice, will you proceed.

8 MR. RICE: I have one or two more questions
9 with regard to the Association. You at one time
10 in your brief mentioned two types of members, the
11 full member and an associate member. Your figure of
12 54, does that include both types of membership?

13 MR. CONDER: No, it does not, we have --
14 the full members are 43 companies; associated
15 members, there are 11 companies.

16 MR. RICE: And this breakdown in percentage
17 that you have told us of the foreign financed members,
18 can you break this down among the 43 and the 11?

19 MR. CONDER: In the 11, I have no percentage,
20 but they are so small that it probably would not
21 necessarily apply. We have -- of the 11 associate
22 members, 7 are U.S. financed; one is Canadian
23 financed; one is U.K. financed and two are European
24 financed.

25 Within those 11 members, I might add, there
26 are six companies which, as I pointed out, would
27 not be eligible, or they would fall into the category
28 of being more of suppliers to the industry.

29 Out of the remaining five, the remaining five
30



1 are distributors only from Canada. We do this, not
2 on the premise that as a Canadian, but as a manufac-
3 turers' association here, that we should primarily
4 represent Canadian manufacturers and our 43 full
5 voting members manufacture and distribute in this
6 country.

7 MR. RICE: Of your 43 members, can you give
8 us a breakdown of the number that are foreign financed?

9 MR. CONDER: Yes, I can, Mr. Rice. I might
10 add that those percentage figures I gave you originally
11 were for that very reason. Of our full members,
12 43 companies, 30 per cent are Canadian financed,
13 49 per cent are U.S. financed, 9 per cent are U.K.
14 financed, and 12 per cent are European financed.

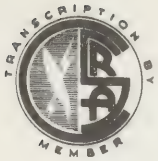
15 MR. RICE: And when you say they are these
16 other countries financed, does that mean the other
17 country has control of the company?

18 MR. CONDER: It would. A company located
19 in another country would have probably 51 per cent
20 of the shares anyway of their company.

21 MR. RICE: In fact, it would be a subsidiary
22 of a foreign company?

23 MR. CONDER: Yes.

24 MR. RICE: When you have that situation
25 and you ask the subsidiary company for material and
26 surveys, were your material necessarily gathered by
27 these foreign companies -- there are various ways
28 of foreign financing from a subsidiary of a parent
29 company and, consequently, it would not give a true
30



1 picture just asking the subsidiary company for informa-
2 tion without relating it to the parent company's
3 information?

4 MR. CONDER: No. We ask the subsidiary
5 company for the information directly because that
6 is a Canadian corporation operating or a Canadian
7 company operating in Canada and the information
8 that we get is the information of that company and
9 not of the parent corporation.

10 MR. WHITE: How many of these companies
11 would be owned and controlled in Canada? How many
12 of the 43 are controlled in Canada?

13 MR. CONDER: 30 per cent, or 13 Canadian
14 financed companies out of the 43 are fully owned
15 Canadian companies.

16 MR. WHITE: 30 per cent Canadian financed
17 does not necessarily mean the same as 30 per cent
18 of these companies are Canadian controlled?

19 MR. CONDER: I would say that -- I would
20 change that from Canadian financed to wholly-owned
21 Canadian companies.

22 MR. WHITE: 13 of the 43, that is?

23 MR. CONDER: That is right.

24 MR. RICE: Of your members, what percentage
25 of the sales market do your members represent; that
26 is, the Canadian sales market in this figure?

27 MR. CONDER: That would range anywhere from
28 80 to 90 per cent.

29 MR. RICE: What per cent of the patents issued
30



1 in Canada would be issued to members of your Association;
2 that is, patents pertaining to drugs manufactured?

3 MR. CONDER: I imagine it would be in direct
4 relationship to the eighty to ninety per cent of
5 pharmaceuticals produced by these companies. As
6 to the patent situation, I don't know that.

7 MR. RICE: Are there any other associations
8 of manufacturers, that is, associations of manufacturers
9 dealing with drugs and pharmaceutical preparations?

10 MR. CONDER: Not in ethical pharmaceutical
11 preparations, although there is the Proprietary
12 Association of Canada, which represents manufacturers
13 and distributors of proprietary or patent medicine
14 preparations.

15 MR. RICE: Are there any recommendations
16 that you or Dr. Dixon can give to the Committee as
17 to how the price of drugs could be lowered in
18 Ontario?

19 MR. CONDER: In the first place, Mr. Rice,
20 I frankly do not believe that the price of drugs
21 is too high in relation to the general cost of
22 living and the overall operation as it is handled
23 in this particular industry.

24 We believe that the prices are completely
25 in line with the cost of living and if there are
26 areas of problem, then, those areas of problem
27 apply to probably a minority of the population which,
28 by virtue of being indigent in some manner, or
29 another, or needing long term medication, find it
30



1
2 difficult to pay for these preparations. There are
3 many things done in this case. If you wish me to
4 enlarge on this point, however, I will be glad to.

5 MR. RICE: Perhaps you might.

6 MR. CONDER: Regarding health services
7 in Ontario, Old Age Pensioners, within the means test
8 are supplied with drugs and medicines by the
9 attending physician. Municipal relief departments
10 of municipalities pay for medicines and prescriptions
11 and the arrangements vary in different localities.
12 Epileptics who are indigent are supplied with
13 sedatives and anti-convulsants by the Ontario
14 hospitals. The Workman's Compensation Board pay
15 for drugs and medicines supplied to those receiving
16 compensation. It is a known fact that some retail
17 pharmacists actually reduce the price at their
18 own expense of medication for elderly patients
19 where the illness requires long term medication.
20 The medical profession uses samples supplied from
21 pharmaceutical companies for this purpose as well
22 and many doctors specifically ask the companies
23 for samples for this reason. To the best of my
24 knowledge, no request from a doctor to a company for
25 medication to help some destitute patient has ever
26 been turned down.

27 THE CHAIRMAN: What would the companies
28 do about it?

29 MR. CONDER: They give them the samples
30 if the doctor has asked for them.



1
2 THE CHAIRMAN: What record have you got
3 of that contribution, Mr. Conder?

4 MR. CONDER: We have no direct record
5 of that contribution, we do know that it does
6 exist. There are many of the companies can testify
7 to that specific case.

8 THE CHAIRMAN: You can't define it further
9 than that?

10 MR. CONDER: No. Probably if---

11 THE CHAIRMAN: I am interested in
12 your statement.

13 MR. CONDER: No. The closest I can
14 define it would be that I have seen letters and
15 examples of companies contributing samples to
16 doctors for this purpose. I have seen letters from
17 doctors and from patients through companies stating
18 that they have received drugs for this specific
19 purpose.

20 THE CHAIRMAN: Do you know what the
21 relationship that the amounts that they actually
22 give compared to the total production of the
23 companies involved?

24 MR. CONDER: I do not know that.
25 I would imagine it would be small.

26 MR. TROTTER: Along that same line,
27 you mentioned that the drugs were supplied to
28 the aged within the means test. Those are just
29 the drugs that are purchased by the Ontario
30 Department of Welfare from the companies?



1
2 MR. CONDER: Yes. No, I am not saying
3 that those were supplied by our companies...

4 THE CHAIRMAN: I am sorry, you
5 go on and finish your answer. You are reading a
6 statement, I believe.

7 MR. CONDER: There is no doubt whatever
8 that the majority of Canadians can afford the cost
9 of drugs which today are well within the average
10 person's pocketbook. This, of course, does not
11 answer the problem of that small percentage who
12 have some form of economic difficulty in this
13 respect.

14 While much is being done to
15 help these people through assistance by pharmacists
16 and doctors and samples of the drug companies,
17 our Association is conscious that this is an
18 area of concern and we are presently looking into
19 this problem and will be considering possibilities
20 at our forthcoming annual meeting. Whether we come
21 up with an answer is presently debatable, but we
22 are looking into it.

23 Regarding aid for the aged in
24 particular I understand from an article which
25 appeared in the Globe and Mail last Friday that
26 the Federal Minister of Health has stated that
27 the Government is now examining the whole area
28 of social security from the viewpoint of our
29
30



1
2 aged and the economic climate in which they live.

3 THE CHAIRMAN: You haven't answered
4 the question, or is there an answer? You have
5 stated the source of drugs for indigents and
6 people unable to pay. But, that was not the
7 question. The question was: From your experience
8 as general manager of the Association do you know
9 of any way in which the cost of drugs as it exists
10 today could be reduced?

11 MR. CONDER: I do not know of any
12 method whatsoever that the cost of drugs could be
13 reduced today.

14 THE CHAIRMAN: Do you think that any
15 further consideration of that would be abortive ?

16 MR. CONDER: I think consideration
17 should always be given to these things, Mr.
18 Chairman, but frankly, I do not believe that there
19 are areas in the manufacture of drugs or supplying
20 of drugs in Canada today which is out of line with
21 the current standard of living and the factors
22 involved in producing our drugs for the reason that
23 our companies are competitive.. In addition to bring-
24 ing out products, our companies are very cometitive
25 with one another on price matters and other factors.
26 If a company can realize suppliers through some form
27 of modification in its production facilities and
28 through its quality-controlled facilities, it would
29 do so with the hope that they would be able to
30 take the edge away from the competition on the



1 specific products in which they are interested.

2 THE CHAIRMAN: Have there been any
3 drug manufacturing companies in Ontario go out
4 of business in the last 12 months?

5 MR. CONDER: Not to my knowledge,
6 not in Ontario.

7 THE CHAIRMAN: In any other part of
8 Canada?

9 MR. CONDER: Yes, in Quebec.

10 THE CHAIRMAN: Do you know the name
11 of the company?

12 MR. CONDER: Merck & Company has curt-
13 ailed its operations.

14 THE CHAIRMAN: No, I said go out of
15 business.

16 MR. CONDER: Not completely.

17 THE CHAIRMAN: Do you know of any
18 drug manufacturing firms who have gone out of
19 business in Canada in the last two years or three
20 or four years back?

21 MR. CONDER: No, I don't, other than
22 companies which may have been assimilated by other
23 firms.

24 MR. BRYDEN: I would like to read
25 one sentence from this article of Silberman in
26 Fortune Magazine: "...executives like John T.
27 Connor, president of Merck and Company, now admit
28 quite freely that reform of promotional practices
29
30



ANGUS, STONEHOUSE & CO. LTD.
TORONTO, ONTARIO

Conder

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is overdue." I don't know if Mr. Connor said that
or not, but Silberman says he said it. Would there
be a possibility of some savings being effected
along that line, in your opinion?



1 MR. CONDER: I don't believe that there
2 would be, Mr. Bryden. Again this is up to the
3 individual company to determine its own practise
4 in this case, but as I pointed out the amounts that
5 are involved in the advertising picture, as I see
6 it, if you were to stop direct mail, or if you were
7 to stop sampling or some specific part of the operation
8 or the advertising or the informational operation,
9 it would not affect the end price of the drugs to
10 any great extent. At the same time this very area,
11 as I mentioned in the brief is one in which it gives
12 the company an opportunity to bring their products
13 to the attention of the doctor, and it gives the
14 doctor an opportunity to find out the factors involved
15 in the various drug products.

16 MR. BRYDEN: You estimated that the entire
17 industry possibly employes 2,000 detail men in
18 Canada. Would that be for all companies in the
19 service of Association?

20 MR. CONDER: That would be all companies.

21 MR. BRYDEN: I take it in the main these
22 are fairly well trained men, these detail men,
23 who would command fairly good salaries. Could you
24 give us an estimate of what the average amount
25 would be that they would receive in salary and expenses
26 during the course of the year?

27 MR. CONDER: I do not know that, but I can
28 get it for you if you so desire.

29 MR. BRYDEN: What I had in mind was for example
30



1 if it was \$10,000 a year salary and expenses, which
2 does not seem to be a very high figure, for 2,000
3 it would be \$20,000,000.

4 MR. WHITE: Did you say \$20,000,000?

5 MR. BRYDEN: \$20,000,000, unless my arithmetic
6 is wrong. I was surprised, so I checked this. This
7 would only allow for a salary of six or seven thousand
8 dollars. I am sure their expenses would be high.

9 MR. CONDER: I do not believe it is in the
10 amount involved, as much as it would be in the
11 advantages which would derived from this system of
12 bringing medication to the attention of the doctor.

13 I think it is borne out by surveys -- it
14 was mentioned in this brief where we referred to one
15 specific survey, but many of them have been carried
16 out bearing out this particular point of their
17 preference for detail men. In almost every firm
18 the majority of doctors prefer detail men to go
19 over the information on the drugs.

20 It stands to reason if a detail man calls
21 on a doctor, the doctor has that detail man in his
22 office. He can question the detail man about a
23 specific product in which he might be interested and
24 get more information from that detail man in a
25 matter of five minutes than he probably could through
26 reading reams of advertising material or reading
27 through various brochures which the companies supply
28 as background information for their drugs.

29 MR. BRYDEN: The detail man is still an
30



1 interested party. I am not trying to cast any reflection
2 ions on them, but all of us are interested parties
3 in some areas or other. It is sort of a rule of
4 our society or convention in our society that an
5 interested party is not the best person to get infor-
6 mation from.

7
8 As a matter of fact your statements in your
9 brief and elsewhere that the major source of information
10 for doctors is the material provided by detail
11 men and so on --

12 THE CHAIRMAN: I don't want to interrupt
13 you, but I must take issue with that statement. You
14 must not speak for me when you say that to get
15 the best information you must not go to an interested
16 party to get it. I would have to disassociate myself
17 from that, Mr. Bryden.

18 MR. BRYDEN: Let me put it this way:
19 this is a field affecting health, and I think it is
20 very important that the information should be
21 impartial in this more than in most fields. An inter-
22 ested party, no matter how honest he is, has
23 a natural disposition to present his information
24 in a way that brings out the best points for his
25 product and plays down the poorer points of his
26 product. I feel concerned that the doctors should be
27 so dependant on interested sources of information.

28 MR. CONDER: There is also another point,
29 Mr. Bryden, that quite often the interested party
30 might be the very party who knows more about the



1 product than anyone else.

2 MR. WHITE: May I speak on this point?

3 THE CHAIRMAN: Yes.

4 MR. WHITE: Using the figure 2,000 detail man
5 and Mr. Bryden's estimate of 10,000 dollars per
6 year for wages -- which is on the low side -- it
7 works out to 20,000,000 dollars. That is about
8 13 per cent of the total sales volume.

9 As I say it may be on the low side because
10 the costs would probably be more than 10,000 dollars
11 per detail man. If you add that to 6 and a half
12 per cent which was spent on direct mail and other
13 forms of advertising, you end up with a figure of
14 20 per cent on the dollar, perhaps even more which
15 does seem excessive, particularly when you consider
16 the remark made by Dr. Ferguson of the Connaught
17 Laboratories who told the Committee that they spent
18 virtually nothing on these two items.

19 Now your Association, it would seem, is
20 spending 20 to 25 per cent of the sales dollar
21 on promotion alone. It really does seem very high
22 to me..

23 MR. HUME: Might I just interject here?
24 I realize it is speculation because we are estimating
25 salary of the detail man, but we will try and find
26 that out. When you talk about 20,000,000 dollars
27 being on the low side, I looked at Page 30 of the
28 brief which shows total wages and salaries including
29 management salaries, directors fees payments to
30



1 employees for holidays and in connection with profit
2 sharing or production incentive plans, unless such
3 payments are distributed only on retirement of
4 employee or some similar basis at \$29,861,499 or
5 approximately \$30,000,000 which seems like the
6 \$20,000,000 figure you have mentioned seems to
7 be more on the high side.

8 Maybe your figure of \$20,000,000 and your
9 subsequent percentage is out of line.

10 MR. WHITE: If there is an inaccuracy here,
11 it is likely about the 2,000 figure that we were
12 given by the witness.

13 Under "wages and salaries" there is only
14 one item, "employee benefits" is another, and "expenses"
15 is another. I am not suggesting that the \$20,000,000
16 would come out of the \$30,000,000. Perhaps half
17 that amount, \$10,000,000 might be in the form of
18 salaries and wages and such.

19 MR. HUME: We will try and get that information,
20 but I thought I should draw to your attention that
21 it seem to me out of line.

22 MR. CONDER: In the brief itself, Mr. White,
23 it is the overall information concerning the process
24 that is involved in getting information concerning
25 goods to the doctor. As it stands, a few companies
26 believe in this and some companies do not. As a
27 matter of fact some companies believe that possibly
28 it is better to bring this information to the attention
29 of the doctor through direct mail rather than having
30



1 too many salesmen.

2 We had example this year about the Canadian
3 Medical Association complaining of the direct mail
4 from certain companies, and it would definitely
5 appear that the majority of doctors would prefer to
6 see a detail man than to have the direct mail.
7 It all depends on the company.

8 MR. WHITE: I know doctors in London that
9 complained the frequency of detail men calling on
10 them.

11 MR. BRYDEN: I have heard about the same
12 thing about them objecting to detail men.

13 MR. CONDER: Some doctors do. It is human
14 nature. On the other hand we get complaints of
15 doctors complaining to the companies, "where is the
16 detail man? I have not seen him for so long."

17 MR. WHITE: Do you think you could establish
18 more precisely what it is costing your Association
19 members for promotions? We calculated it roughly
20 between 20 and 25 per cent. It would be interesting
21 to me and presumably to the other members of the
22 Committee to find that out more exactly.

23 THE CHAIRMAN: I gather this witness does
24 not know any of these details, Mr. White.

25 MR. WHITE: No he does not, but I am asking
26 if he could get that information for us.

27 THE CHAIRMAN: Wouldn't it be better directed
28 to Mr. Ayers? Do any of your members own or control
29 any retail outlets, Mr. Conder?
30



1
2 MR. CONDER: I do not believe that any of
3 our members own or control retail outlets as such.

4 THE CHAIRMAN: Do they engage in direct
5 selling to the consumer?

6 MR. CONDER: To the best of my knowledge,
7 no, other than what might appear in over the counter
8 pharmaceuticals.

9 THE CHAIRMAN: But that is still through
10 an intermediary pharmacist?

11 MR. CONDER: That is correct.

12 THE CHAIRMAN: On Page 22 in the last paragraph,
13 fourth line from the bottom you say:

14 "New drugs placed on the market may at
15 first carry a higher price in order to contribute
16 to the heavy costs involved in producing and
17 introducing drugs. As time progresses, prices
18 drop."

19 Could you give me three examples of that?

20 MR. CONDER: I have given 90 examples that
21 are attached to this of products which have declined
22 in price.

23 THE CHAIRMAN: At what point?

24 MR. CONDER: Over the period.

25 MR. BRYDEN: Are those 90 separate products?
26 I have checked that with the supporting documents
27 which you gave, and I find in very many cases they
28 were really based on different forms of the same brand
29 of the same drug. Items 50 to 56 inclusive are
30 one brand of one drug, but they are different sized



1 tablets, and that sort of thing. It would seem
2 to me that essentially it is just one product.
3 That is not the only case I have. I found 12 cases
4 that you could check where that happened.

5 MR. CONDER: Yes, that is drugs that are put
6 out in different dosage forms and different applications
7 for different uses, and these products were supplied
8 to us by companies. I did not use them all. I
9 just put down two pages of them for that purpose.

10 MR. WHITE: At that very point, would the
11 Association be prepared to file a full list of all
12 the replies obtained and all the comments made from
13 the hundreds of examples submitted. 90 products
14 were selected, and it might not be a bad idea to
15 have the full list placed in the hands of our
16 secretary, if that is agreeable to the Association.

17 THE CHAIRMAN: Would you look into that,
18 Mr. Gadsby and Mr. Ayers?

19 Coming back to the question on Page 22,
20 you referred me to Appendix B. The sentence which
21 engages my attention is on the third line of the
22 last paragraph, "as time progresses, prices drop."

23 In Appendix B, I do not see anything about
24 the dates when the prices dropped or about the time
25 element. Using your language, Mr. Conder, what makes
26 prices drop?

27 MR. CONDER: A variety of different factors
28 may come into it. A product might be on the market
29 for any period of time without underwriting its
30



1 initial cost of producing and introducing that product,
2 which is invariably high at the beginning and as a
3 result it may bring the price down.

4 Again someone may come out with a product
5 that might conceivably be a little different, and
6 this brings in another competitive factor which they
7 must meet.

8 THE CHAIRMAN: Even without having recovered
9 their initial cost?

10 MR. CONDER: Yes, because if you keep your
11 price of your product too high, if you have not
12 recovered your initial cost, that is not going to
13 sell your product.

14 THE CHAIRMAN: You get into the very question
15 of what determines prices, is it the cost of production
16 or is it volume of sales or is it demand and competi-
17 tion?

18 MR. CONDER: Yes.

19 THE CHAIRMAN: Do you know the answer to
20 that?

21 MR. CONDER: I would imagine, sir, it would
22 be a combination of all.

23 MR. BRYDEN: Except that the demand factor
24 does not work too strongly in this, does it? The
25 person who buys the product does not order it and
26 the person who orders it may not know the price.

27 MR. CONDER: I believe it has been shown
28 in many cases, and this is something which can be
29 borne out by individual companies by specific examples,
30



1 that you cannot keep a product with an inflated
2 price on the market too long.

3 MR. BRYDEN: Not too inflated. The patient
4 would probably go back and kick to the doctor.

5 MR. TROTTER: I would like to ask what type
6 of drugs bring the biggest profit to a drug firm,
7 the antibiotics, the tranquillizers, the cortisone?
8 what is the most profitable?

9 MR. CONDER: It actually depends on the
10 company's operation itself. All companies do not
11 manufacture or engage in all types of drugs such
12 as you suggest. You may have one company, for example,
13 which produces only one or two ataractic drugs.
14 It is conceivable to that company that the ataractic
15 drug might be a better producer from the company
16 viewpoint. Again, you might have another company
17 which has another ataractic drug, a form of antibiotic,
18 and it might conceivably be that this company
19 would think the antibiotic was the greater producer
20 for them.

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24 Page 1342 follows
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MR. CONDER: But companies don't generally work out all their operations on specific lines. They take it from the overall operation as it stands. If you have about 20 or 25 products that are very, very, low-volume products that are carrying the major load of the company, and you bring in a new product which you feel will be a large volume product, then you automatically have to work out your price based on the overall company operation.

MR. TROTTER: And the companies you represent, I believe you said the companies represent a share of about 80 to 90 per cent of the drug market in Canada?

MR. CONDER: Yes.

MR. TROTTER: Would there be any particular three companies or five companies that would have by far the greater volume?

MR. CONDER: Not on specific products as such. It depends on the companies. Even the companies who may be considered big companies are quite often diversified in the type of products which they turn out.

MR. TROTTER: The drug market as a whole, no matter what kind of drug they turn out, wouldn't there be a certain five companies that would pretty well control the entire drug market?

MR. CONDER: No. I believe that was pointed out in Doctor Dixon's report that there is no mere handful of companies which control the market in



1

2 Canada as such. It is diversified in that respect.

3 MR. TROTTER: Would there be any idea,
4 of, say, what percentage of the drug market Parke
5 Davis would have?

6 MR. CONDER: We haven't gone into the
7 marketing aspects of it. That is a question you would
8 have to ask Parke Davis.

9 MR. TROTTER: Would there be any figure
10 the DBS might have on what percentage of the market
11 a certain firm has?

12 DR. DIXON: If I may make a comment.
13 DBS will not give individual firm sales figures. The
14 extent to which they go is indicated at page 7 of the
15 report where they do group them according to sales
16 volume, and give the sales volume for the number of
17 firms, give some measure of the concentration in the
18 market.

19 In 1958, for instance, there were eight
20 firms who happened to have over five million dollars
21 sales, each had 63.7 million dollars worth of sales
22 and there was another grouping of 29 with 66.5 million.
23 That is as far as they go.

24 THE CHAIRMAN: Would this be a convenient
25 time, Mr. Trotter, to adjourn until tomorrow morning
26 at 10.15?

27 MR. HUME: Is there any question that
28 any member of the Committee has specifically to ask
29 Doctor Dixon? He has to leave tonight. We will all
30 be back, but if there is some unanswered thing, he



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would take a minute and clean it up. Unfortunately,
he has to leave Toronto. If not, we will be here
in the morning.

THE CHAIRMAN: I presume he would be
available by mail?

DR. DIXON: Oh, yes.

THE CHAIRMAN: I would presume you
gentlemen have taken many months to prepare this very
able document, and I would think we would have some
questions after we have had a week or so to digest it.

MR. WHITE: I have one right now.

MR. BRYDEN: I have some but I think they
are too complicated right now.

MR. WHITE: I may write you a letter.

THE CHAIRMAN: 10.15, gentlemen.

--- Hearing adjourned.

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